National Park Service
U.S. Department of the Interior

# Asset Management:
# Asset Management Reporting System

July 2006

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# Asset Management Reporting System (AMRS) User Manual

July 2006

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# INTRODUCTION

This manual is designed to provide users with the information they need to access and run management reports through the Asset Management Reporting System (AMRS). The AMRS is a web-based portal that allows report writers to make their work available over the National Park Service (NPS) intranet.

The Facility Management Software System (FMSS) provides Servicewide management capabilities for facility management personnel. However, the reporting capabilities built into the FMSS are limited and do not provide the power needed to bring facility management information into the hands of the people who could use it most effectively.

To maximize the potential of the FMSS and to more effectively use and provide facility management information, the FMSS program is implementing the AMRS.

This manual is a component of the deployment of the AMRS to facility management information consumers and producers across the NPS. Through the AMRS, pre-defined reports can be generated, viewed, printed, and e-mailed, either immediately, upon demand, or at a subsequent date or time when server usage is likely to be low.

The purpose of this manual is to show you how to access, run, and review the output of the pre-defined facility management reports that have been provided through the AMRS. It is intended to serve as a job-aid to those individuals using the FMSS data.

Throughout the manual, you will notice the occasional appearance of the following icons. They mark notes, terms, and instructions and help to clarify important points.

The computer monitor icon highlights keystrokes needed to input data into the AMRS.

The wrench indicates useful tools or tips that can be used within the software, including shortcuts or time-saving methods in the FMSS computer application.

The caution sign indicates that you should be careful to pay particular attention to a specific aspect of the content, as it will have an impact on your success.

This symbol designates a listing of the key terms to look for as you review the handbook content. The key terms will be easily identified by the key symbol in the left margin.

# GAINING ACCESS TO THE ASSET MANAGEMENT REPORTING SYSTEM (AMRS)

## Obtaining an Account

If you already have access to the FMSS, you will automatically be given AMRS access. Your NPS username and password will be used to log on; this is the same username and password you use to log into your computer. If you are not an FMSS user, you will need to contact the Facility Management Program (FMP) HelpDesk to gain access to the system. Contact the FMP HelpDesk by email at FMP_Help_Desk@nps.gov or by telephone at 303-969-2609.

## Logging onto the AMRS

The AMRS is accessed through your web browser. It can only be accessed through the NPS intranet. To access the reporting system, open your web browser (Microsoft Internet Explorer 5.0 or higher) and go to the following web address:

http://pfmd2.nps.gov/fmp/fmss/

Under “Access to Other Applications,” you will see a link to the Asset Management Reporting System. Click on this to go to the AMRS login page.

The following screen will appear:

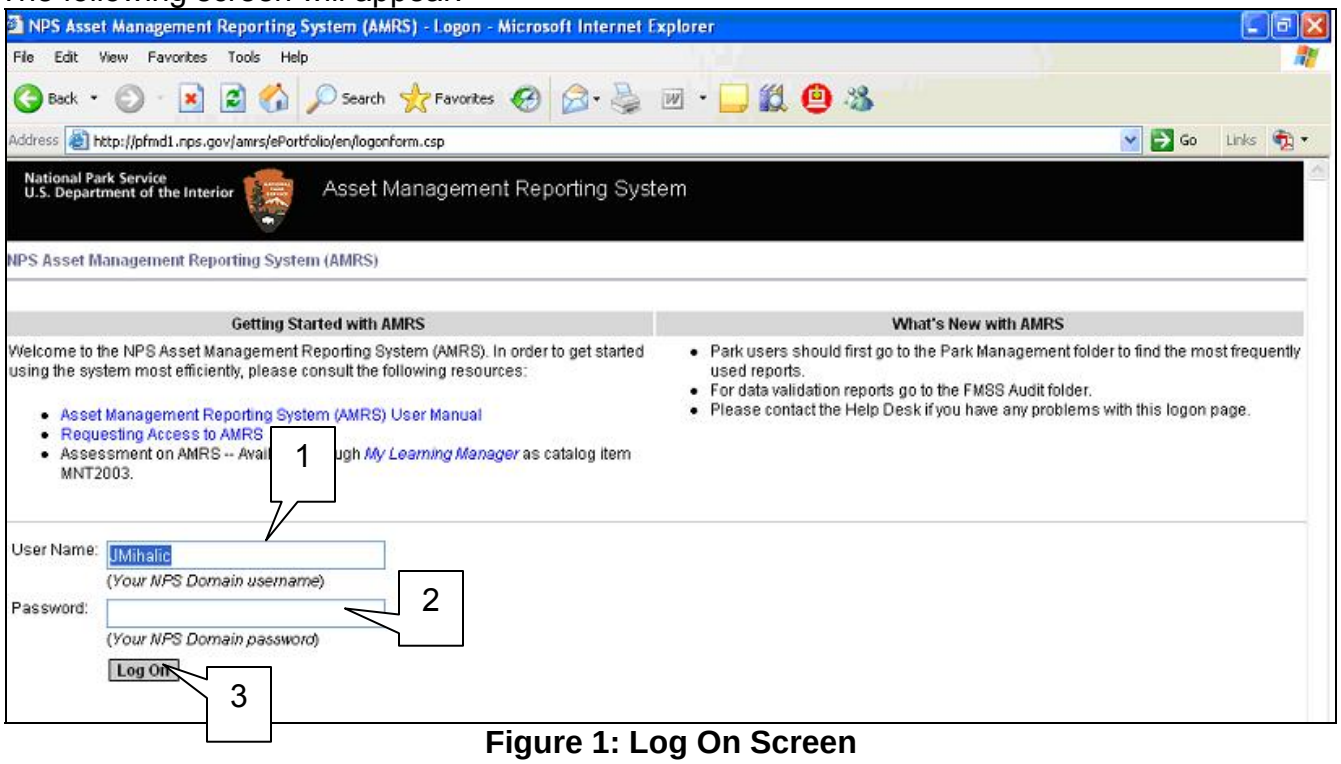

NPS Asset Management Reporting System (AMRS) - Logon - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://pfmd1.nps.gov/amrs/ePortfolio/en/logonform.csp
Go Links
National Park Service
U.S. Department of the Interior
Asset Management Reporting System
NPS Asset Management Reporting System (AMRS)
Getting Started with AMRS
Welcome to the NPS Asset Management Reporting System (AMRS). In order to get started using the system most efficiently, please consult the following resources:
Asset Management Reporting System (AMRS) User Manual
Requesting Access to AMRS
Assessment on AMRS -- Avail ugh My Learning Manager as catalog item MNT2003.
What's New with AMRS
Park users should first go to the Park Management folder to find the most frequently used reports.
For data validation reports go to the FMSS Audit folder.
Please contact the Help Desk if you have any problems with this logon page.
User Name:
JMihalic
(Your NPS Domain username)
Password:
(Your NPS Domain password)
Log On
1
2
3

**Figure 1: Log On Screen**

1 Enter your NPS **Username**. This is the username you use to log into your computer.
2 Enter your NPS **Password.** Again, this is the password you use to log into your computer.
3 Click the **Log On** button.

You should now be successfully logged onto the AMRS.

# NAVIGATION OF THE ASSET MANAGEMENT REPORTING SYSTEM (AMRS)

Once you have logged on, you should see the AMRS home page, which provides entry to all of the pre-defined reports to which you have access.

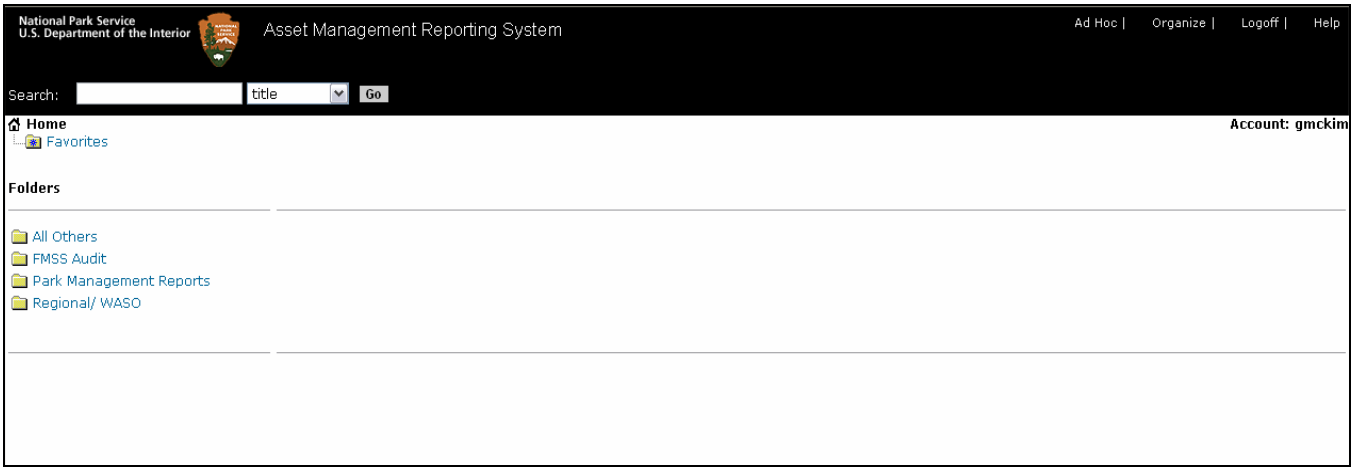



**Figure 2: Reports in the Park Management Folder**

To open a folder, double-click on the folder icon.

## Report Organization and Usage

As Figure 2 illustrates, reports are divided into four major folders:

- All Others
- FMSS Audit
- Park Management
- Regional/WASO

The Park Management, Regional/WASO, and FMSS–Audit folders include reports that have been identified as meeting most of an FMSS user's routine reporting needs.

- Park Management reports are the detailed reports that are most likely to be useful to park facility managers.
- Regional/WASO reports are those that are most likely to be useful at the regional level and WASO, emphasizing the ability to roll-up and summarize data from multiple parks.
- FMSS Audit reports are those that are useful in maintaining and validating the quality of asset management and work order data in the system.

NOTE: Reports are organized by *suggested* use, not *required* use. In other words, all user levels, from park manager to WASO supervisor, may find reports in other organizational folders useful. Regardless of your position, explore the other folders to view all of your reporting options.

You will also be able to build your own personal favorite reports folder that only you can see, which allows you to store the reports you use most frequently in one place for your own usage. You will learn more about this option in the section, *Development of Personal Favorite Reports Folder*, beginning on page 9.

Other reports that most individuals use more sporadically can be found under the All Other reports folder. These are organized by major FMSS application (e.g. Inventory, Labor, Plans, Purchasing, etc.).

> **CAUTION** Reports in the All Other reports folder have not been validated or formatted and are more likely to be updated at some point in the future. When a report is updated, it affects anyone who has scheduled the report to run at a certain time. If a report you have scheduled is changed, you will need to reschedule it in order for it to run correctly.

NOTE: New reports will be created from time to time and added to the appropriate folders. Therefore, you may see some additional reports available beyond those that are shown in the figures in this manual.

## Navigating Report Folders

If you double-click on a selected folder, the reports within that folder will be displayed in a list.

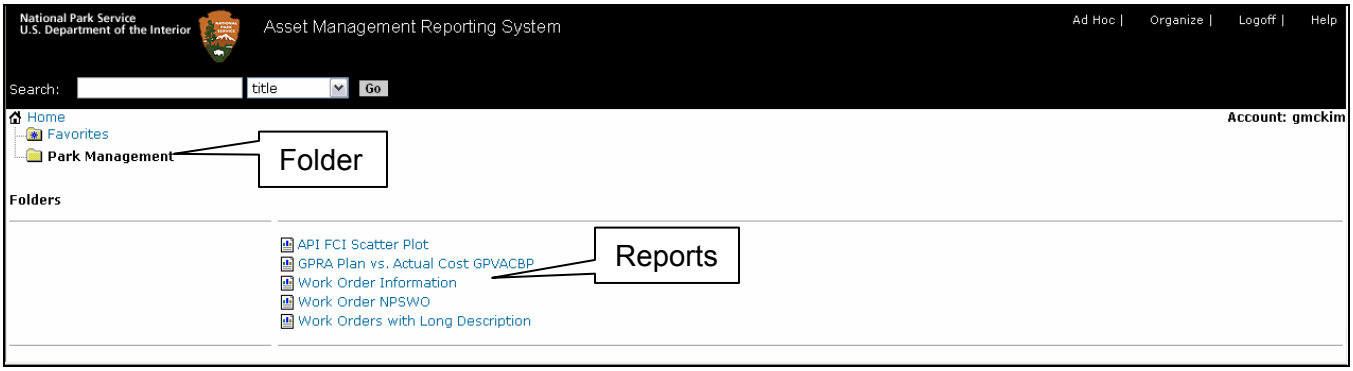



**Figure 3: Report Sub-Folder Organization**

To see additional details about a particular report, move your mouse over the title of the report. You will see a brief description of the report, as seen in Figure 4.

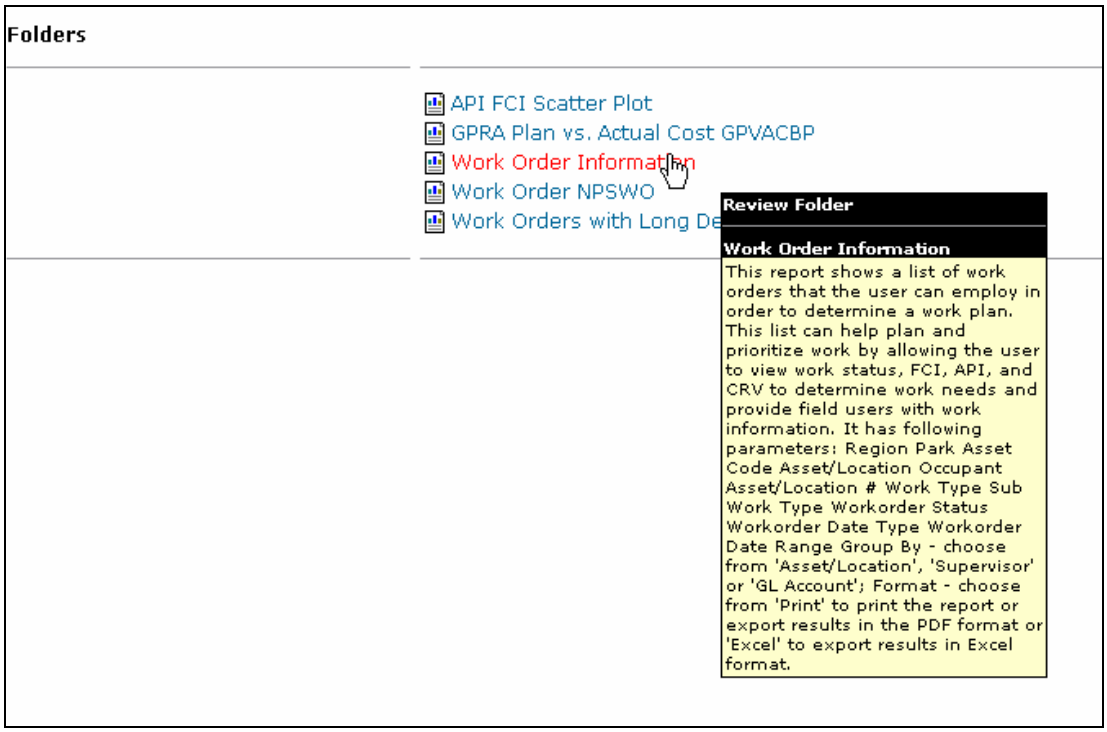

Folders
API FCI Scatter Plot
GPRA Plan vs. Actual Cost GPVACBP
Work Order Information
Work Order NPSWO
Work Orders with Long De
Review Folder
Work Order Information
This report shows a list of work orders that the user can employ in order to determine a work plan. This list can help plan and prioritize work by allowing the user to view work status, FCI, API, and CRV to determine work needs and provide field users with work information. It has following parameters: Region Park Asset Code Asset/Location Occupant Asset/Location # Work Type Sub Work Type Workorder Status Workorder Date Type Workorder Date Range Group By - choose from 'Asset/Location', 'Supervisor' or 'GL Account'; Format - choose from 'Print' to print the report or export results in the PDF format or 'Excel' to export results in Excel format.

**Figure 4: Report Roll-Over Description**

## Action Menu Description

There are three main actions that can be performed on any report: View, Schedule, and History. To open a report menu, click on the report name. In this example, clicking on the Work Order Information report title will open the Work Order Information action menu.

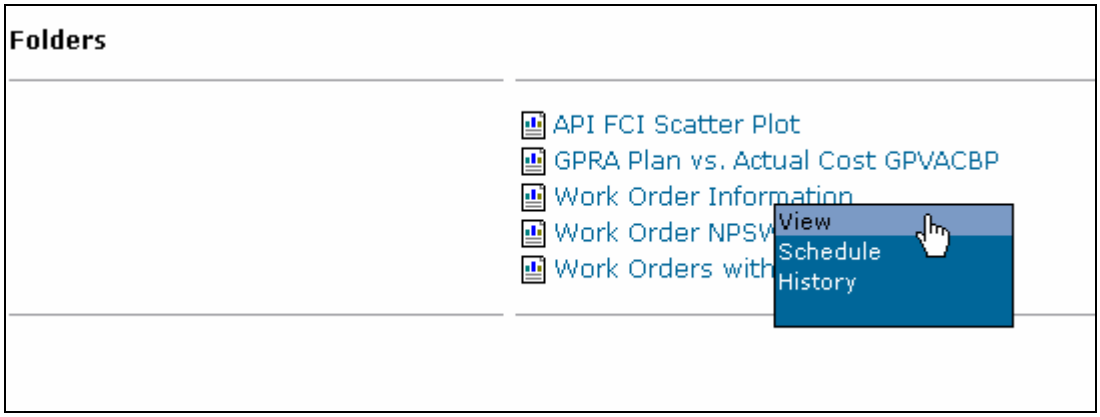



**Figure 5: List of Reports and Action Menu**

The functions of the three buttons of the action menu—View, Schedule, and History—are listed below.

**View:** Generates and displays the report interactively, using the most current data available.

**Schedule:** Programs reports to run at a time designated by the user. The user may also schedule reports to run periodically.

**History:** Shows the recent scheduled history of this report, which includes who generated the report, what the parameters were, the date it was generated, and whether or not it was generated successfully.

The View Button: The View button, which allows reports to be generated interactively and online, is best used when the user needs the most current data. Occasionally, for very large reports containing many thousands of records, the report may take up to ten minutes to generate; however, it typically takes less than a minute. Alternatively, by viewing the History of a report, a report can often be generated in a few seconds. However, a report generated in this fashion may not contain the most current data, and it may not be based on the parameters that you want to use. If the user needs a report to generate periodically, such as daily, weekly, or monthly, then it should be scheduled in advance during off-hours so that the reports are generated at a time when the server is not experiencing a high volume of user traffic.

Further information about the action menu will be given in the next chapter: *The Detailed Functions of the Action Menu*.

### Development of Personal Favorite Reports Folder

Although the folders described above represent an attempt to identify those reports that are most likely to be useful to FMSS users, you also have the ability to create your own personal Favorite reports folder, which can be used to provide quick access to the reports that you use the most. This folder will only be visible to you; other users will have their own Favorite reports folders. By adding and deleting reports from this folder, you can easily and quickly access your most commonly used reports.

To create your Favorites folder, click on the link labeled “Organize” in the upper right-hand corner of the screen. You will then see the Organize Folders dialog box:

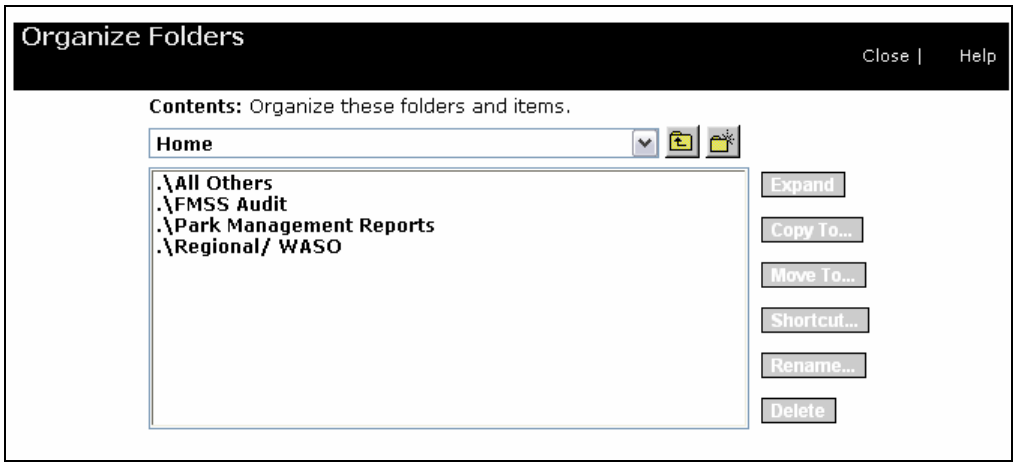



**Figure 6: Organize Folders Dialog Box**

The Organize Folders dialog box allows you to move reports into and out of your Favorites folder. To copy the report "Work Order Information" from where it is in the Park Management folder into your Favorites folder, first click on the Park Management folder, and then click the Expand button. You will see a list of the reports in the Park Management folder, as shown below.

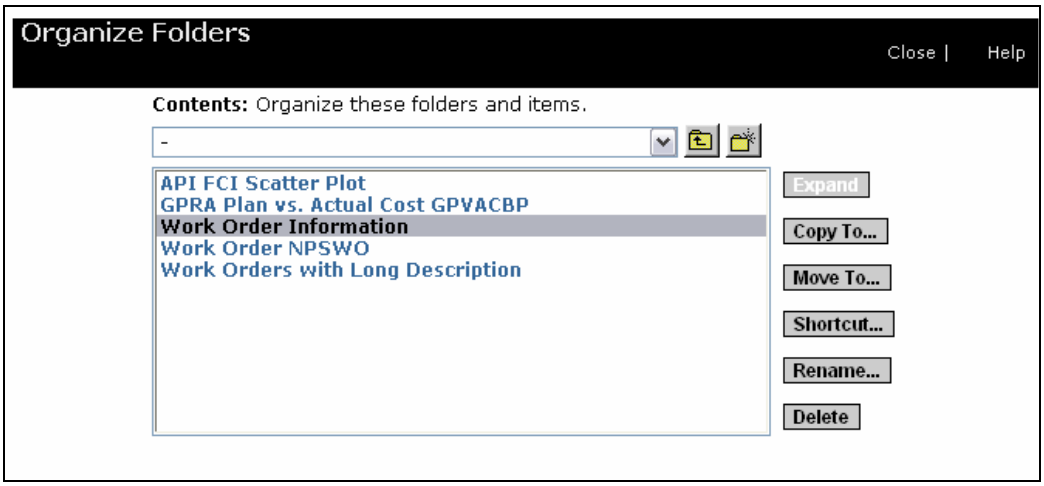



**Figure 7: Expanded Folder View – Reports in the Park Management Folder**

Highlight the report you want to copy to your Favorite reports folder and click the Copy To… button.

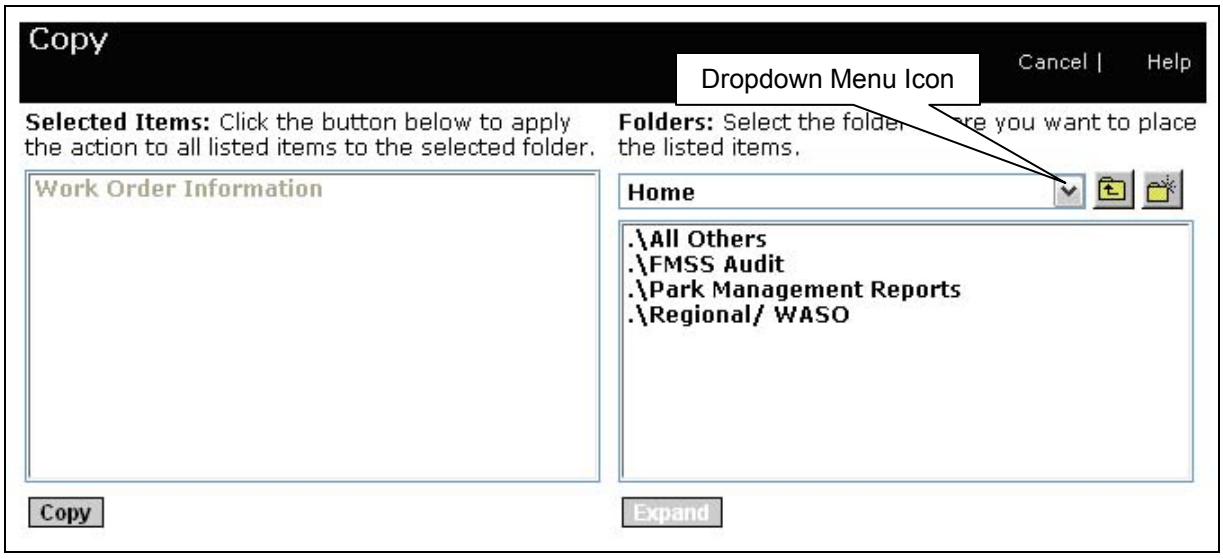



**Figure 8: Copy Folders Window**

In the left panel, you will see the report that you are copying. On the right, you will see the folder into which you can copy the report. Notice that you will not see your Favorite reports folder. To see your Favorite reports folder, you must go up one level in the folder hierarchy. You can do this by clicking on the dropdown menu icon and choosing Favorites.

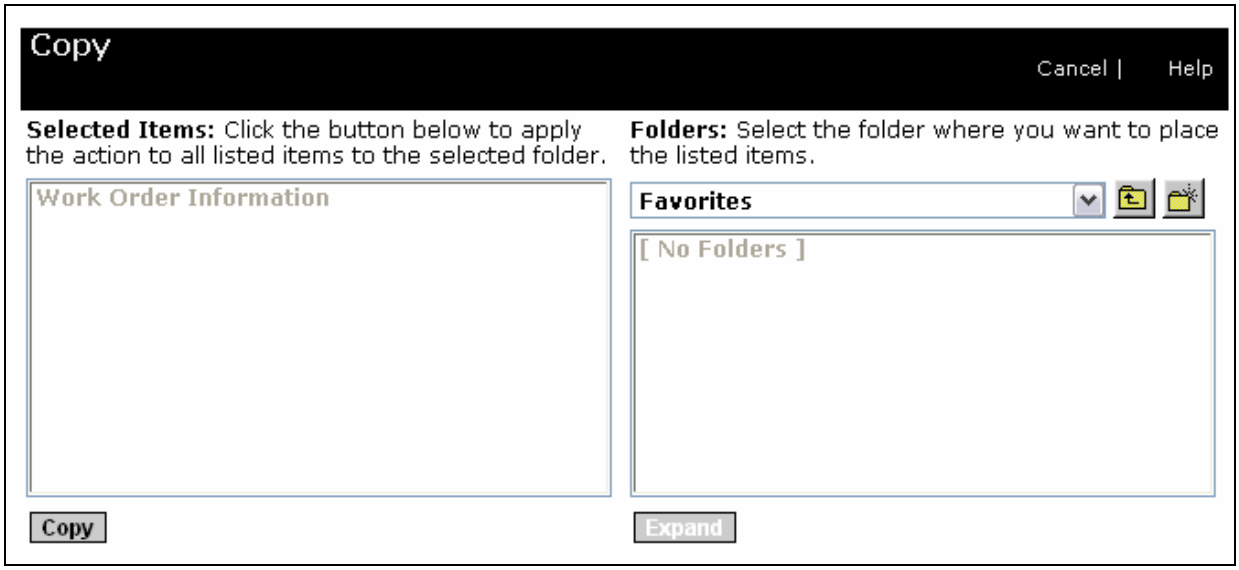

Copy
Cancel |
Help
Selected Items: Click the button below to apply the action to all listed items to the selected folder.
Folders: Select the folder where you want to place the listed items.
Work Order Information
Favorites
[ No Folders ]
Copy
Expand

**Figure 9: Copying Reports to Your Favorite Reports Folder**

Clicking on the icon will display all of the reports currently in your Favorite reports folder. When you first begin to use the AMRS, there will be no reports in this folder. To copy the report "Work Order Information" into your Favorite reports folder, click the Copy button.

You will now be able to view and work with reports in your Favorites reports folder by clicking on the Favorites link from the home page (see Figure 10).

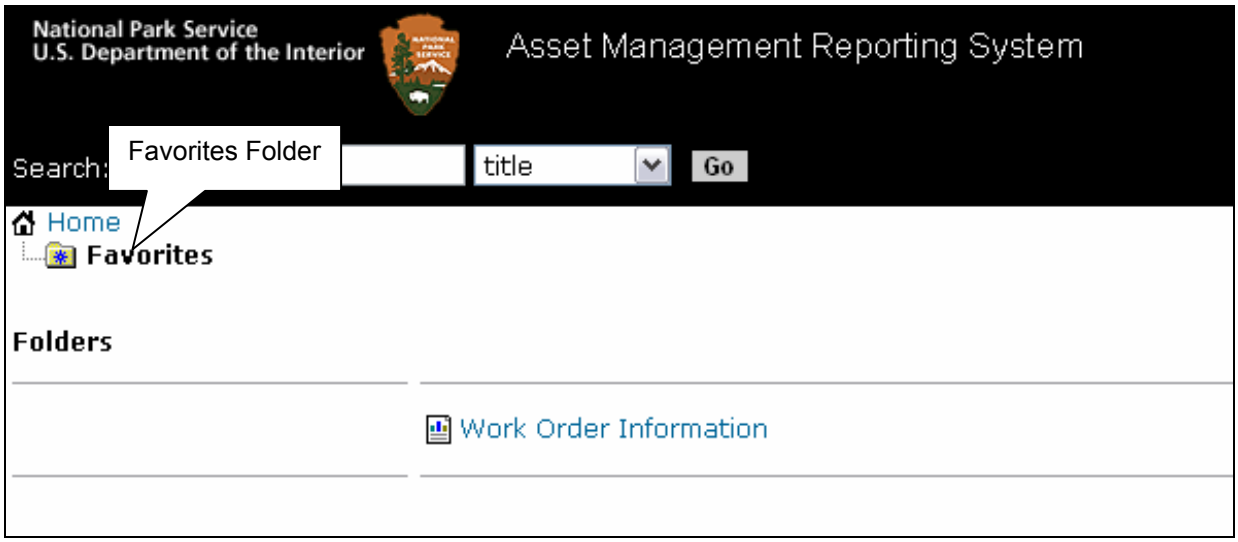



**Figure 10: Folder Content View highlighting the Favorites Folder**

You should now have a basic idea of how to navigate through the folders of the AMRS. We will now turn to the action menu to outline the basic purpose and multiple functions of the system.

# DETAILED FUNCTIONS OF THE ACTION MENU

As you learned earlier, the action menu has three basic functions: View, Schedule, and History. Again, to access the action menu, you simply click on the name of the report you wish to view or schedule (see Figure 5). From there you will choose one of the three available actions, whose functions we will now outline.

## Function and Use of the View Option

The View option generates reports interactively. Clicking on the View icon will open the parameter window. An example of the parameter window is illustrated below (Figure11).

Parameters: Parameters allow you to choose the exact information you want to include in your report. The parameters available for a given report will differ depending on the nature of the report. Examples of parameters include: region, park alpha code, asset/location, work order status, occupant, and many others.

NOTE: It is important that each parameter is filled in, even if you select “ALL” as the value of the parameter (ALL locations, ALL asset types, etc.).

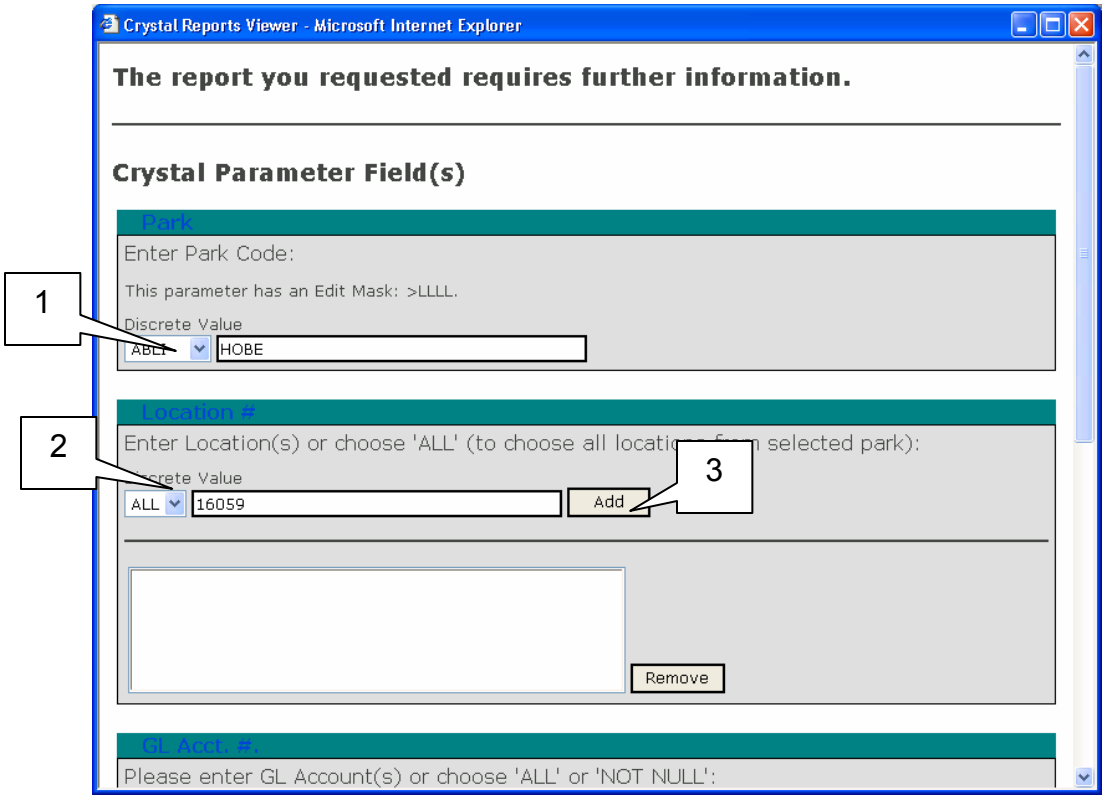



**Figure 11: Report Parameter Window**

## Selecting Parameters

1 The first parameter in this example is for the **park alpha code.** You may either type the code in all capital letters or select it from the drop-down menu or pick list.

**CAUTION** It is very important to remember that you must use all capital letters (e.g. “GRCA”, rather than “grca”) when entering your park alpha code or the report will not be generated.

NOTE: In this parameter field, users may also enter numeric location identifiers used in the FMSS. For example, 32764 is the identifier for the North Rim of the Grand Canyon. This would give a more specific location than entering GRCA.

The “Edit Mask” that you see in the example in Figure 11 is an internal code used by the computer to define the format for a particular parameter. You can ignore the edit mask.

2 Another common parameter is **Asset/Location**. In this example, you are allowed to enter more than one value for a parameter.

3 Select a value in the drop-down menu, and click on the **Add** button. Repeat until you have all the desired values in the window.

## Entering Date Parameters

Some reports require that you enter dates or date ranges as parameters. For example, you may view reports on work orders based on the date they were created. The figure below shows an example of the date parameter. To fill in this field, click the calendar icon to the right of the parameter. A pop-up calendar window will appear. Click on the date that you want to use as the value for each date parameter. Many of the reports allow the user to select which date range type they want, such as Report Date, Target Start Date, Actual Start Date, etc.

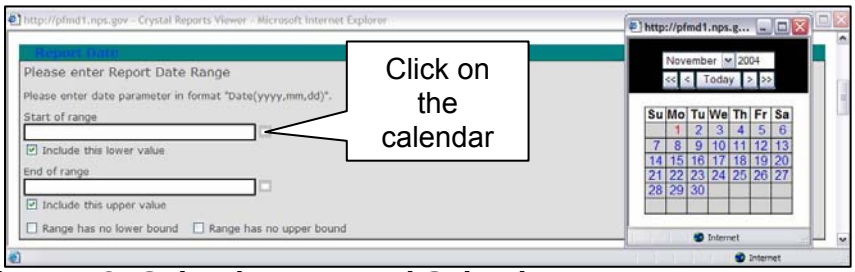



**Figure 12: Calendar Icon and Selecting a Date Parameter**

**CAUTION** You should generally use the Calendar, as illustrated above, to enter date parameters when generating a report. If you want to enter the date manually, you must enter the date in the format that the AMRS expects: Date (YYYY,MM,DD). For example, to enter February 1, 2005, you would type: Date (2005,02,01).

The lower value or bound refers to the earliest point in the report’s history. Entering in no upper bound will return records up to the current date. However, you must have a lower bound or upper bound specified for AMRS to run the report.

| CAUTION | When entering parameters, you *must* click the Add button at least once, even if you are selecting the "ALL" value for the parameter. |
|---|---|

.
After entering all parameter values, click the **OK** button to generate the report.

The report will appear in one to three minutes, depending on the length and amount of data you have requested. Remember, very large reports may take longer to generate.

NOTE: For more information and definitions of the different FMSS report parameters, see Appendix B.

## Navigation Using the AMRS Viewer

The AMRS Viewer allows you to browse and navigate interactively through the results of the AMRS report. It also allows you to save and print the report.

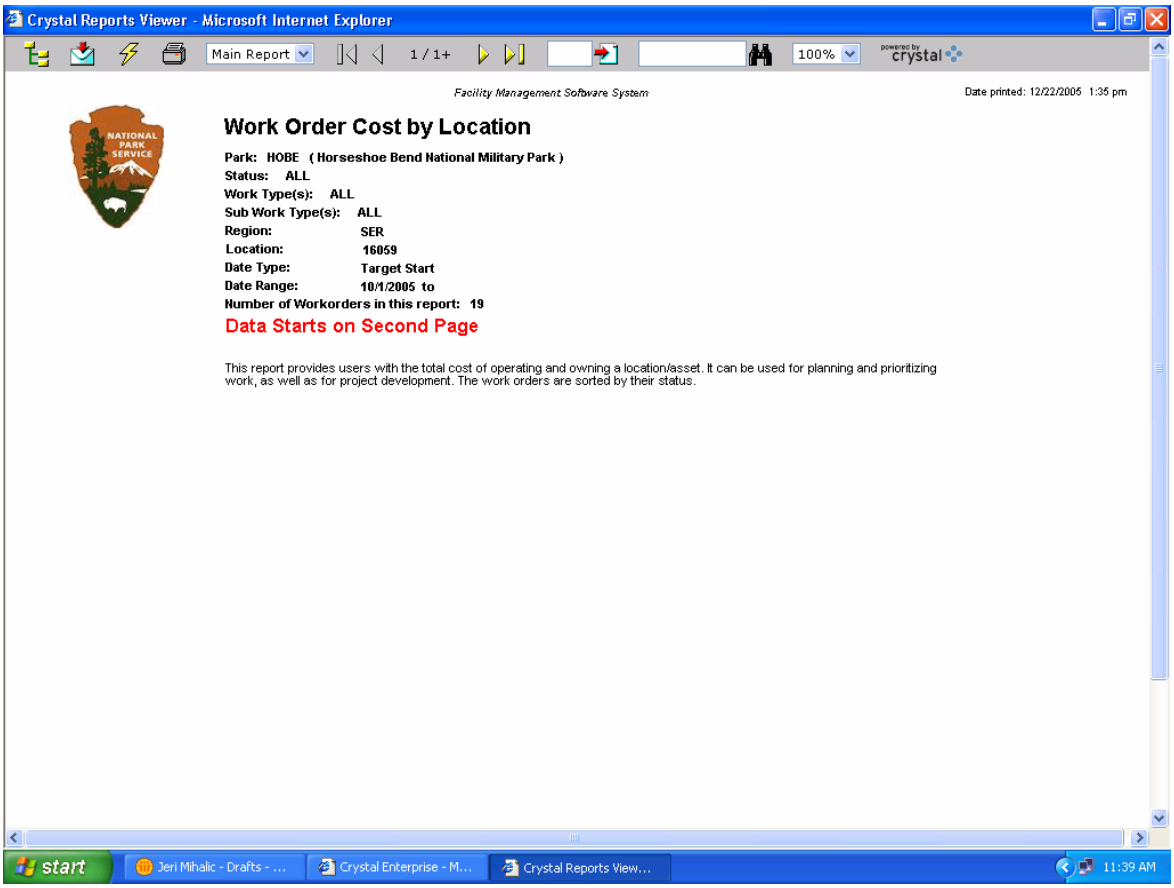

Crystal Reports Viewer - Microsoft Internet Explorer
Main Report
1 / 1+
100%
crystal
Facility Management Software System
Date printed: 12/22/2005 1:35 pm
Work Order Cost by Location
Park: HOBE ( Horseshoe Bend National Military Park )
Status: ALL
Work Type(s): ALL
Sub Work Type(s): ALL
Region: SER
Location: 16059
Date Type: Target Start
Date Range: 10/1/2005 to
Number of Workorders in this report: 19
Data Starts on Second Page
This report provides users with the total cost of operating and owning a location/asset. It can be used for planning and prioritizing work, as well as for project development. The work orders are sorted by their status.
start
Jeri Mihalic - Drafts - ...
Crystal Enterprise - M...
Crystal Reports View...
11:39 AM

**Figure 13: Example of a Report First Page**

The first page of a report, as shown in Figure 13, usually provides the documentation for a report. In this example, the documentation consists of the name of the report (e.g. "Work Order Information"), the parameters used in generating this report, and some information about the appropriate usage of the report.

To move on to the second page of the report, where the data begins, click the Next Page icon, , which will open the AMRS Viewer window, as shown in Figure 14.

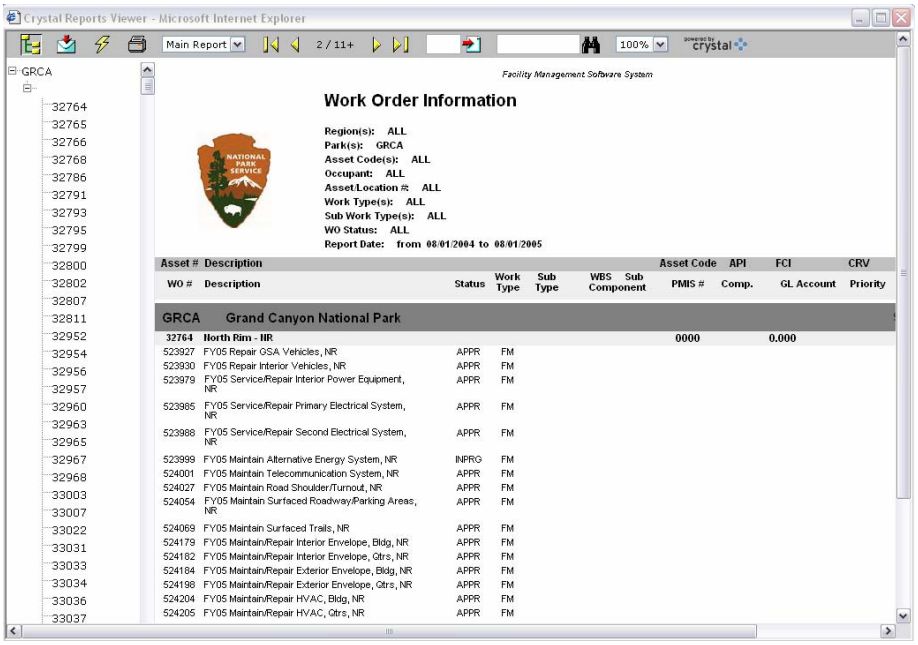

Crystal Reports Viewer - Microsoft Internet Explorer
Main Report
2 / 11+
100%
GRCA
Facility Management Software System
Work Order Information
Region(s): ALL
Park(s): GRCA
Asset Code(s): ALL
Occupant: ALL
Asset/Location #: ALL
Work Type(s): ALL
Sub Work Type(s): ALL
WO Status: ALL
Report Date: from 08/01/2004 to 08/01/2005
Asset # Description
Asset Code API FCI CRV
WO # Description Status Work Type Sub Type WBS Sub Component PMIS # Comp. GL Account Priority
GRCA Grand Canyon National Park
32764 North Rim - IIR
0000 0.000
523927 FY05 Repair GSA Vehicles, NR APPR FM
523930 FY05 Repair Interior Vehicles, NR APPR FM
523979 FY05 Service/Repair Interior Power Equipment, NR APPR FM
523985 FY05 Service/Repair Primary Electrical System, NR APPR FM
523988 FY05 Service/Repair Second Electrical System, NR APPR FM
523999 FY05 Maintain Alternative Energy System, NR INPRG FM
524001 FY05 Maintain Telecommunication System, NR APPR FM
524027 FY05 Maintain Road Shoulder/Turnout, NR APPR FM
524054 FY05 Maintain Surfaced Roadway/Parking Areas, NR APPR FM
524069 FY05 Maintain Surfaced Trails, NR APPR FM
524179 FY05 Maintain/Repair Interior Envelope, Bldg, NR APPR FM
524182 FY05 Maintain/Repair Interior Envelope, Qtrs, NR APPR FM
524184 FY05 Maintain/Repair Exterior Envelope, Bldg, NR APPR FM
524198 FY05 Maintain/Repair Exterior Envelope, Qtrs, NR APPR FM
524204 FY05 Maintain/Repair HVAC, Bldg, NR APPR FM
524205 FY05 Maintain/Repair HVAC, Qtrs, NR APPR FM

**Figure 14: AMRS Viewer Window**

The menu bar at the top of the AMRS Viewer window contains a series of buttons that allow you to move around the report and print or export the report to a variety of formats.

**Group Tree:** Clicking this button turns the group tree on or off. The group tree allows you to navigate quickly to a particular group of data. In this example, the group tree shows all the locations that are in the report. In the window above, the group tree is on the left side of the report. Clicking on a location number will move you to the page with that location data. Turning off the group tree allows the user to see more data fields without having to scroll across.

**Export:** Clicking this button allows you to send the output to a file using a variety of file formats. Once you select a file type, you will then need to select a file name and location, just as if you were saving a file. The file formats that you can export from the Crystal Report Viewer are as follows: Adobe Acrobat, MS Word, MS Excel, MS Excel (Data only), and Rich Text Format. The file formats are described in Table 1 (see pages 30-31).

**Refresh:** The refresh button permits you to run the report again, allowing you to choose different parameters. This will not save the parameters you already selected; all parameters will have to be identified again.

**Print**: This allows you to print the report. The print options will correspond to your specific printer and the printers that are available to you on your network. You should always confirm the number of pages that the report will generate before you print.

## Navigation Buttons

This series of arrow buttons allows you to move through the pages of the report.

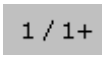
Go to first page

Go back one page

Go forward one page

Go to last page

**Skip to Page Function:** Allows you to enter a specific page number and skip to that page. To use this, type a page number in the box and click on the page icon.

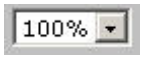



**Page Number:** Shows you which page you are on and how many total pages are in the report. However, the number that shows you the total number of pages in the report will not be accurate until you view the last page in the report. By default, it is "1+", which only tells you that there is more than one page in the report. To find out the total number of pages in the report, click the "go to last page" icon (as shown above). Note that this could take some time for very long reports.

**Search:** Entering text (called the "search string") in this box allows you to search for occurrences of the search string in the report. You do not have to enter a complete word, and the search is not case sensitive. For example, searching on the word "park" will find instances of "Park," "park," "Parker," and "spark."

To activate the search, click the "binoculars" icon; it will search for and highlight the next instance in the document of the search string that you have entered in the box. The search will start from the page you are viewing.

Limitations to the Search Function: The Search function currently ignores the first page of the report. This problem has been acknowledged by the AMRS vendor, and it will be repaired as soon as possible. Also, the Search function only finds the first instance of the search string on a page. Each subsequent search moves on to the next page of the report. Finally, the Search function highlights the instance of the search string that is found, and moves the cursor to the appropriate position in the report. To be able to click on the "binoculars" icon again to search for further occurrences of the search string, you will have to scroll up to the top of the report.




**Size:** This allows you to magnify or reduce the size of the output on the screen.

## Export and Analyze Data

Most reports can be exported into PDF format, which will maintain the look and feel of the AMRS report. This is most useful when you want to review the report but do not need to manipulate the data.

There are times in which you will want to do your own analysis of the data generated by an AMRS report. Microsoft Excel is an excellent tool for data manipulation; it allows you to reformat, summarize, sort, filter, chart, and create formulas from your facilities management data. Fortunately, it is quite easy to export data from the AMRS Viewer into Excel.

To begin the process of exporting data, simply click the "Export" icon from the AMRS Viewer. This will bring up the Export Options window.

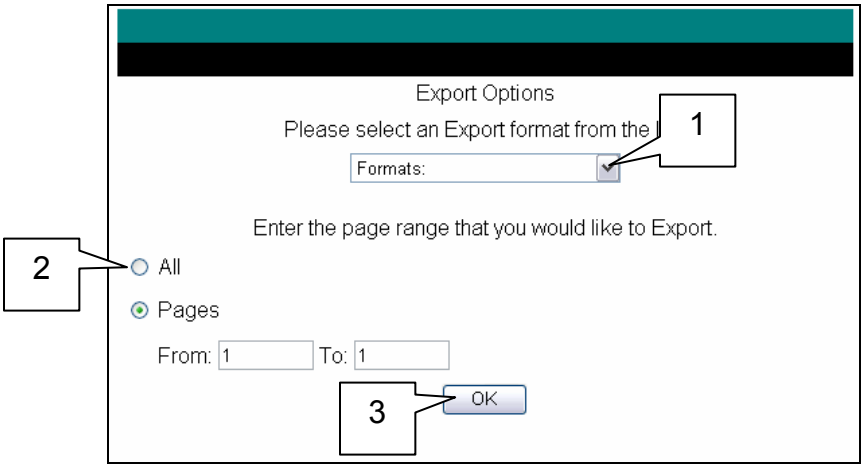


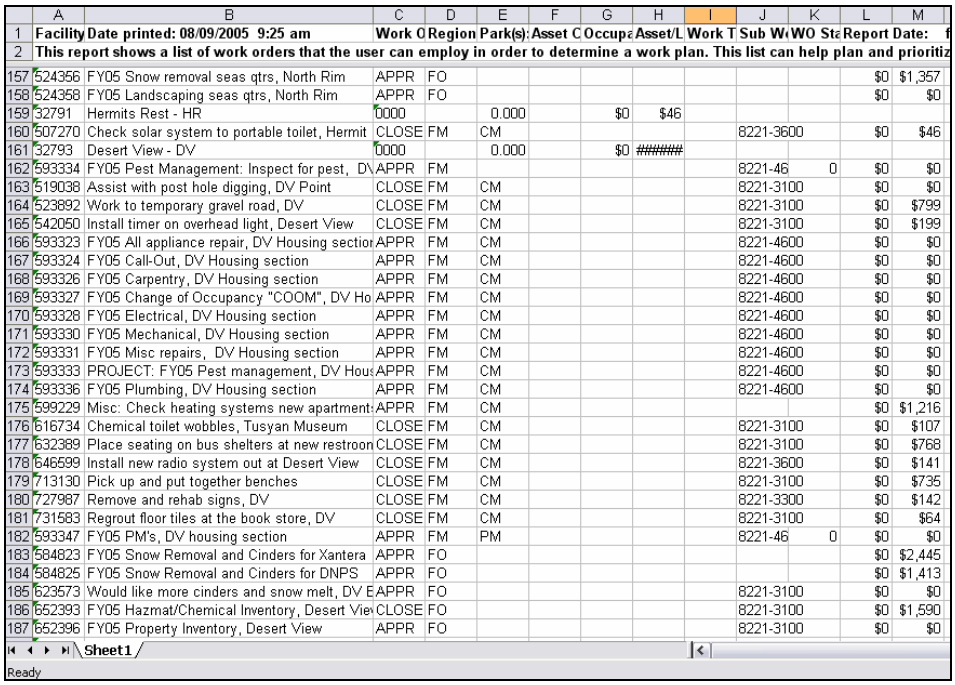

**Figure 15: Export Options Window**

To complete the exporting process:

1. From the Export Options window, choose **MS Excel 97-2000 (Data only)** or **Acrobat Format (PDF)** as the format from the drop-down menu.
2. Verify that the **All** (for pages to export) button is selected.
3. Click the **OK** button to export. You will then be prompted to save the exported file (the default file name is CrystalViewer.xls, but you can change that).

If you have exported the data to MS Excel, you can open the file in Microsoft Excel, and manipulate the data using any Excel features.

Not all reports are suitable for an Excel format. Those reports that are optimized for exporting to Excel are labeled as such.



| | A | B | C | D | E | F | G | H | I | J | K | L | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Facility | Date printed: 08/09/2005 9:25 am | Work O | Region | Park(s): | Asset C | Occupa | Asset/L | Work T | Sub W | WO Sta | Report Date: | f |
| 2 | This report shows a list of work orders that the user can employ in order to determine a work plan. This list can help plan and prioritiz | | | | | | | | | | | | |
| 157 | 524356 | FY05 Snow removal seas qtrs, North Rim | APPR | FO | | | | | | | | $0 | $1,357 |
| 158 | 524358 | FY05 Landscaping seas qtrs, North Rim | APPR | FO | | | | | | | | $0 | $0 |
| 159 | 32791 | Hermits Rest - HR | 0000 | | 0.000 | | $0 | $46 | | | | | |
| 160 | 507270 | Check solar system to portable toilet, Hermit | CLOSE | FM | CM | | | | | 8221-3600 | | $0 | $46 |
| 161 | 32793 | Desert View - DV | 0000 | | 0.000 | | $0 | ####### | | | | | |
| 162 | 593334 | FY05 Pest Management: Inspect for pest, DV | APPR | FM | | | | | | 8221-46 | 0 | $0 | $0 |
| 163 | 519038 | Assist with post hole digging, DV Point | CLOSE | FM | CM | | | | | 8221-3100 | | $0 | $0 |
| 164 | 523892 | Work to temporary gravel road, DV | CLOSE | FM | CM | | | | | 8221-3100 | | $0 | $799 |
| 165 | 542050 | Install timer on overhead light, Desert View | CLOSE | FM | CM | | | | | 8221-3100 | | $0 | $199 |
| 166 | 593323 | FY05 All appliance repair, DV Housing section | APPR | FM | CM | | | | | 8221-4600 | | $0 | $0 |
| 167 | 593324 | FY05 Call-Out, DV Housing section | APPR | FM | CM | | | | | 8221-4600 | | $0 | $0 |
| 168 | 593326 | FY05 Carpentry, DV Housing section | APPR | FM | CM | | | | | 8221-4600 | | $0 | $0 |
| 169 | 593327 | FY05 Change of Occupancy "COOM", DV Ho | APPR | FM | CM | | | | | 8221-4600 | | $0 | $0 |
| 170 | 593328 | FY05 Electrical, DV Housing section | APPR | FM | CM | | | | | 8221-4600 | | $0 | $0 |
| 171 | 593330 | FY05 Mechanical, DV Housing section | APPR | FM | CM | | | | | 8221-4600 | | $0 | $0 |
| 172 | 593331 | FY05 Misc repairs, DV Housing section | APPR | FM | CM | | | | | 8221-4600 | | $0 | $0 |
| 173 | 593333 | PROJECT: FY05 Pest management, DV Hou | APPR | FM | CM | | | | | 8221-4600 | | $0 | $0 |
| 174 | 593336 | FY05 Plumbing, DV Housing section | APPR | FM | CM | | | | | 8221-4600 | | $0 | $0 |
| 175 | 599229 | Misc: Check heating systems new apartment | APPR | FM | CM | | | | | | | $0 | $1,216 |
| 176 | 616734 | Chemical toilet wobbles, Tusyan Museum | CLOSE | FM | CM | | | | | 8221-3100 | | $0 | $107 |
| 177 | 632389 | Place seating on bus shelters at new restroon | CLOSE | FM | CM | | | | | 8221-3100 | | $0 | $768 |
| 178 | 646599 | Install new radio system out at Desert View | CLOSE | FM | CM | | | | | 8221-3600 | | $0 | $141 |
| 179 | 713130 | Pick up and put together benches | CLOSE | FM | CM | | | | | 8221-3100 | | $0 | $735 |
| 180 | 727987 | Remove and rehab signs, DV | CLOSE | FM | CM | | | | | 8221-3300 | | $0 | $142 |
| 181 | 731583 | Regrout floor tiles at the book store, DV | CLOSE | FM | CM | | | | | 8221-3100 | | $0 | $64 |
| 182 | 593347 | FY05 PM's, DV housing section | APPR | FM | PM | | | | | 8221-46 | 0 | $0 | $0 |
| 183 | 584823 | FY05 Snow Removal and Cinders for Xantera | APPR | FO | | | | | | | | $0 | $2,445 |
| 184 | 584825 | FY05 Snow Removal and Cinders for DNPS | APPR | FO | | | | | | | | $0 | $1,413 |
| 185 | 623573 | Would like more cinders and snow melt, DV E | APPR | FO | | | | | | 8221-3100 | | $0 | $0 |
| 186 | 652393 | FY05 Hazmat/Chemical Inventory, Desert Vie | CLOSE | FO | | | | | | 8221-3100 | | $0 | $1,590 |
| 187 | 652396 | FY05 Property Inventory, Desert View | APPR | FO | | | | | | 8221-3100 | | $0 | $0 |

Sheet1

Ready

**Figure 16: Example of Exported Excel Spreadsheet**

NOTE: Some reports will actually provide a parameter specifying the format in which the report will be generated. If you intend to export your report to Excel, then choose “Excel” when this parameter becomes available (see Figure 17).

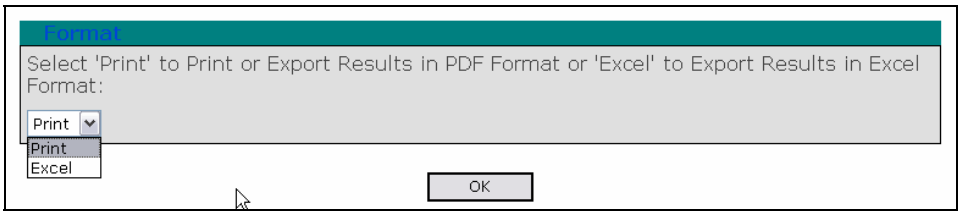



**Figure 17: Window of the Print/Excel Drop-Down Menu**

Otherwise, choose Print. By choosing Excel, you are instructing AMRS to generate a more “stripped down” version of the report: one which contains all of the data, but no extraneous formatting. This makes importing into Excel cleaner.

### Function and Use of the Schedule Option

Rather than run the report right away, you can schedule the report to run sometime in the future. Based upon your needs, you may choose to run a report once, or establish a schedule to run reports at a given time, such as every day, week, or month.

Once scheduled reports have been generated, there are several destinations to which you can automatically send them, including your e-mail inbox. Each of the available options is discussed in the *Destination* section below.

To schedule a report, select the Schedule option for the report. The Schedule window will appear.

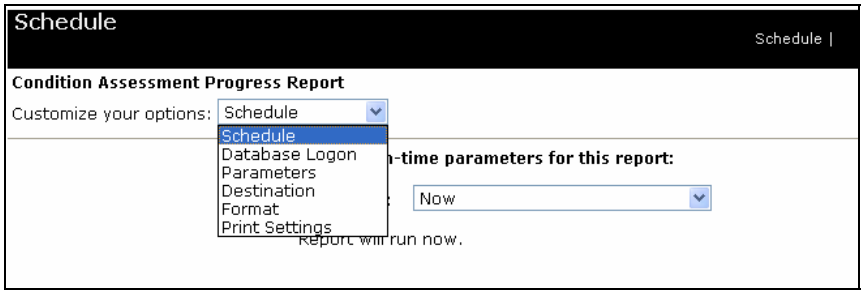



**Figure 18: Schedule Window**

Each item in the options drop-down menu has default values. You should check each item to make sure that the default values are correct. After you have concluded making changes to a page, be sure to click the page's Update button (if one is available).

To schedule and run a report, you will need to perform actions involving each one of the six options that make up the Schedule drop-down menu: Schedule, Database Logon, Parameters, Destination, Format, and Print Settings.

## Schedule

The Schedule option allows you to specify how frequently you want a report to be generated (see Figure 19, below).

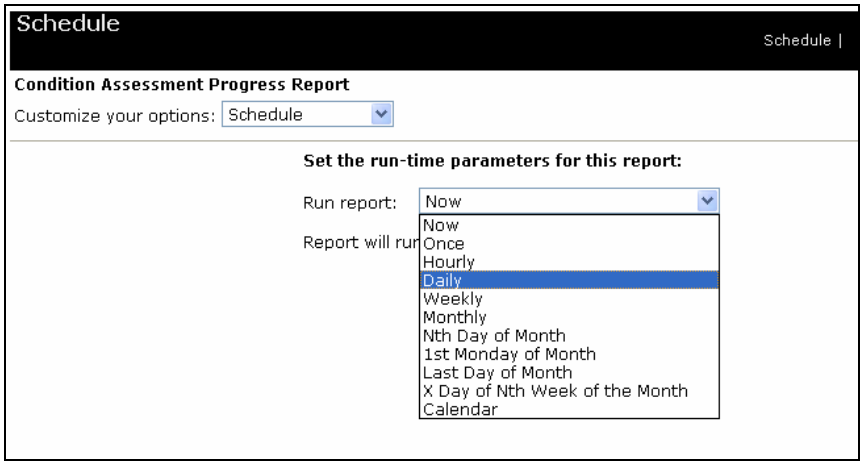



**Figure 19: Schedule Options**

Each of the choices will open a different screen. Fill out the appropriate fields on the scheduling screen. For example, selecting "Daily" will take you to the Daily window.

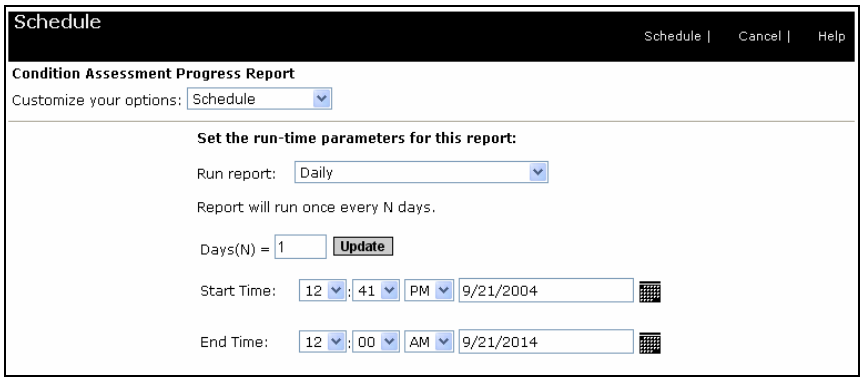

Schedule
Schedule | Cancel | Help
Condition Assessment Progress Report
Customize your options: Schedule
Set the run-time parameters for this report:
Run report: Daily
Report will run once every N days.
Days(N) = 1 Update
Start Time: 12 : 41 PM 9/21/2004
End Time: 12 : 00 AM 9/21/2014

**Figure 20: Schedule Daily Window**

Fill out the appropriate fields in the window. You can set up a report to run every day or every other day by changing the field, Days(N). When the Days(N) field is set at 1, the report will run every day. If it is set to 2, then it will run every other day.

**CAUTION** When you change the date interval (labeled "Days(N)="), you have to click the Update button for the change to take effect.

## Database Logon

You should not modify anything on this screen; you can skip it.

## Parameters

You should fill out the parameters for a scheduled report in the same way as you would when generating an interactive report. Figure 21shows an example of the parameters associated with the report "Work Order Cost By Location." Note that these parameters are the same as those that would be used if the report were generated interactively.

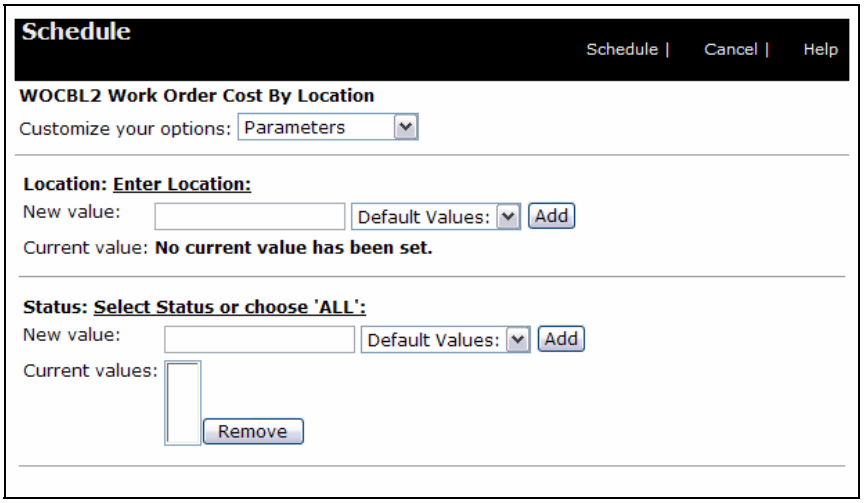

Schedule
Schedule | Cancel | Help
WOCBL2 Work Order Cost By Location
Customize your options: Parameters
Location: Enter Location:
New value: Default Values: Add
Current value: No current value has been set.
Status: Select Status or choose 'ALL':
New value: Default Values: Add
Current values: Remove

**Figure 21: Report Scheduling Parameters Window**

**CAUTION** You must fill in all of the parameters for a report to run correctly. When running a report, you will be prompted to enter any missing parameters. However, when scheduling a report, the system will *not* tell you whether you have forgotten to enter a parameter. It is very important to ensure you have entered all parameters when scheduling a report or the report will not run correctly.

## Destination

Destination refers to the location to which the report output is sent after it has been generated. The available options are illustrated in Figure 22 below.

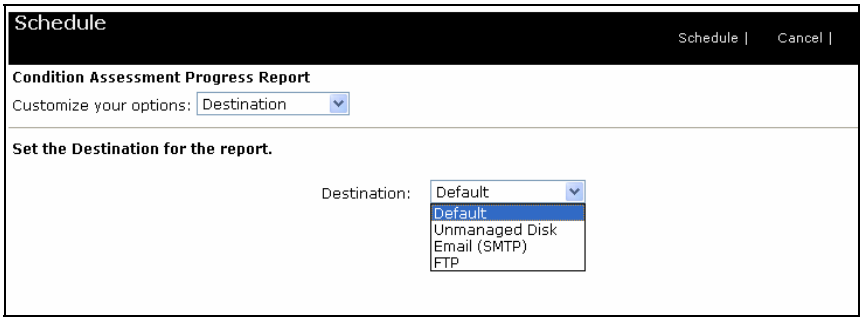



**Figure 22: Destination Window**

These are the choices available from the Destination drop-down menu.

**Default**: The Default choice saves the report output in the AMRS' file structure. You can then view the results directly from the History window in Figure 26. This is the typical option, but it requires you to log into the AMRS to view the results of your scheduled report.

**Unmanaged Disk**: Unmanaged Disk allows the user to change the file destination, but the destination must be part of the Enterprise network. This option is not supported.

**Email**: This allows you to email the output to an email address. See Figure 23 for more details.

**FTP**: Do not choose the FTP option. It is disabled.

## Email Option Walk-through

If you wish to email the output to an email address, you will select Email from the Destination drop-down menu. The Email Option window will open:

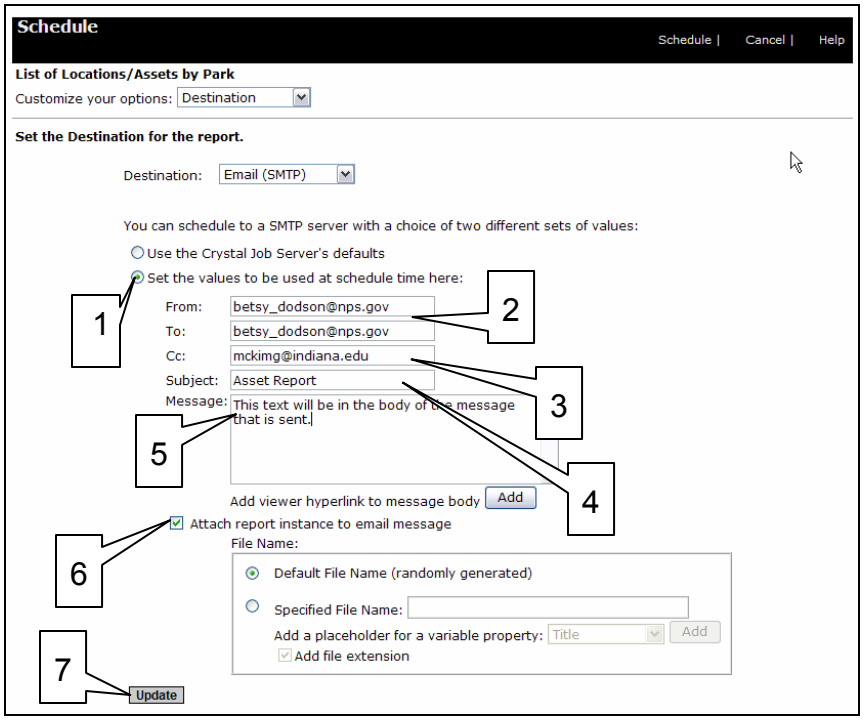



**Figure 23: Email Option Window**

Once this window has opened, follow the steps below to email your report (output).

1. Click on the **Set the values to be used** button to set email options.
2. Enter your email address or the address of the person to whom you want to send the output in both the "from" and "to" fields. Note that the email address must be in a valid email address in Internet email format (e.g. betsy_dodson@nps.gov).
3. Use the **cc** field to send reports to other recipients.
4. Enter the name of the report in the subject line.
5. Fill in any text that you want to go in the message body in the "Message" box.
6. Verify that the box labeled "Attach report instance to email message" is checked to ensure that the report results are actually attached to the message.
7. Click on the **update** button after you have filled in all the fields.

The report will be sent to the designated addresses.

## Format

Format refers to the file format of the report to be generated. See Table 1 on pages 30-31 for a description of the different file formats.

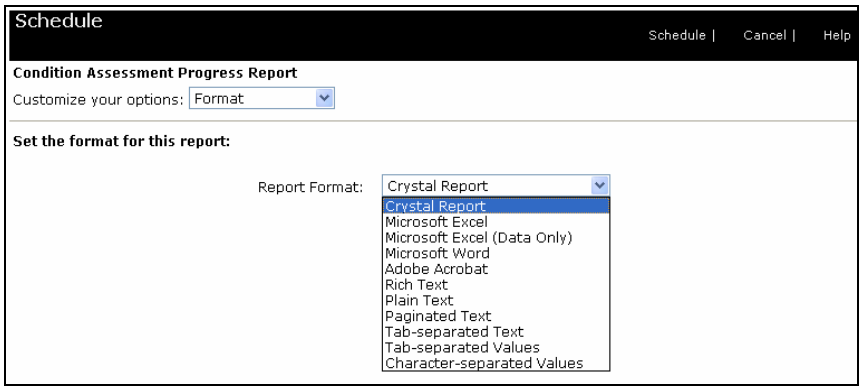



**Figure 24: Report Format Window**

While Crystal Report is the most common and flexible report format, you can only view Crystal Report-formatted files if you are logged into the AMRS or if you have the AMRS program installed on your own computer.

NOTE: If you plan to have the results of the report e-mailed to you or wish to distribute it to others who do not have access to the AMRS, then do not use the Crystal Report format. Instead, generate the report in alternative programs, such as Microsoft Excel or Adobe Acrobat. Microsoft Excel is the recommended format if you want your recipient to be able to manipulate the data further. Adobe Acrobat is the recommended format if you want the recipient of the report to be able to print and view the results but not manipulate the data.

**CAUTION** It is very important to remember to click on the schedule tab after completing all the selections, or all the information you have entered will be lost.

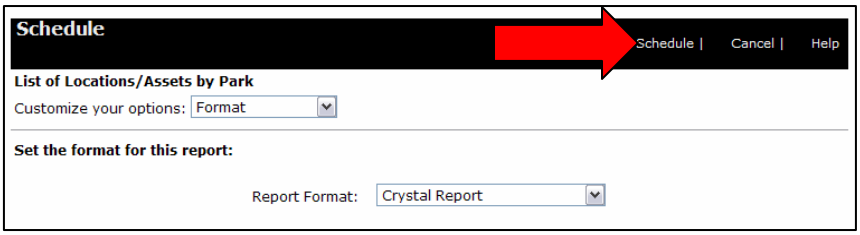

Schedule
Schedule | Cancel | Help
List of Locations/Assets by Park
Customize your options: Format
Set the format for this report:
Report Format: Crystal Report

**Figure 25: Scheduling a Report**

## Print Settings

Print Settings allow you to modify options associated with the manner in which the finished report is printed. You will not be using this option; instead, you will print the report directly from the AMRS Viewer or Microsoft Word, Microsoft Excel, or Adobe Acrobat, depending on the format in which you are generating the report.

### Function and Use of the History Option / Window

When you click on the schedule tab, a window will pop up showing the history of the report and its status.

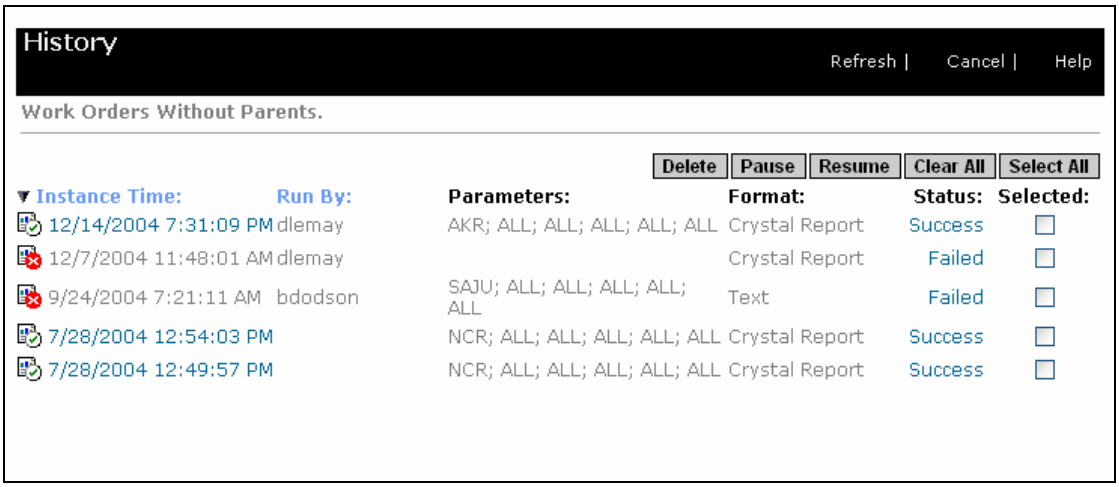



**Figure 26: History Window**

To view the report output, click on the date/time field for the instance of the report that you would like to view. The options of instances you may view are illustrated in Figure 26 above. By clicking on the date/time field "9/16/2004 3:04:17 PM," for example, you will be able to view the output of the report generated at that specific date and time.

To update the status of the reports by refreshing your History Window, click on the "Refresh" tab.

NOTE: You can always go back to the history of instances of the report by clicking on the "History" link for the report, as was illustrated in the *Navigation* section in Figure 6.

You can check on the status of a report by clicking on the words in the Status column. For example, if the report failed, then you can find out what the error was by looking at the status (as illustrated in Figure 27, below).

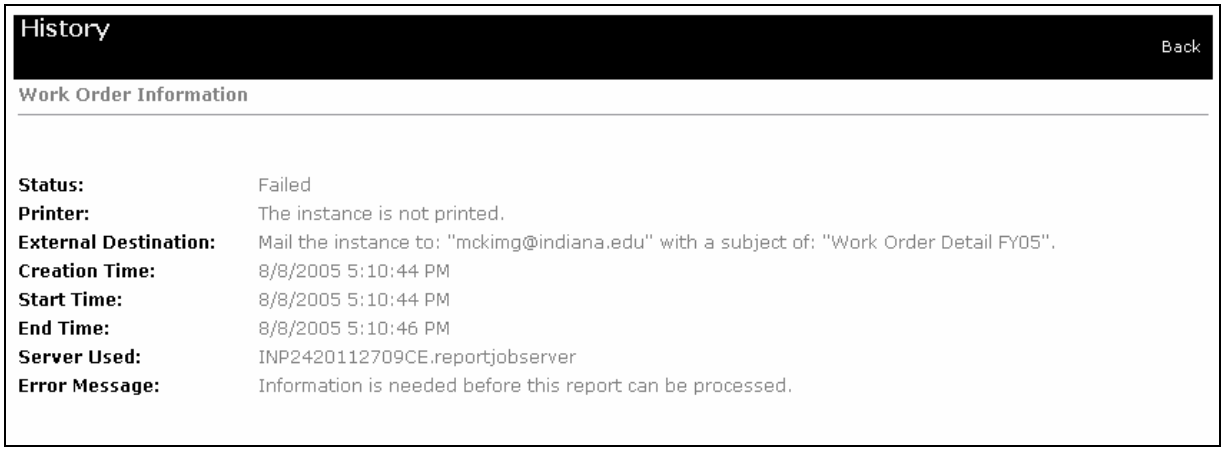

History
Back
Work Order Information
Status: Failed
Printer: The instance is not printed.
External Destination: Mail the instance to: "mckimg@indiana.edu" with a subject of: "Work Order Detail FY05".
Creation Time: 8/8/2005 5:10:44 PM
Start Time: 8/8/2005 5:10:44 PM
End Time: 8/8/2005 5:10:46 PM
Server Used: INP2420112709CE.reportjobserver
Error Message: Information is needed before this report can be processed.

**Figure 27: Report Status Window**

The available statuses are as follows:

- **Success:** The report was generated successfully.

- **Failed:** The report was not generated successfully. Usually, the cause of failure is a parameter that is either not entered properly, or not entered at all.
- **Running:** The report is still running. Click the refresh tab to refresh the history window or check again later. Most reports take between one and 10 minutes, although it may take more during heavy server usage times.
- **Recurring:** The report is scheduled to be re-run automatically, at the interval that was specified when the report was scheduled.
- **Pending:** The report has been scheduled to be run once at some future time.

## WHERE TO GO FOR HELP

Once you begin to use the AMRS, you may have questions. To get answers to your questions, you should consult the following sources. They are listed in the order of suggested action.

| | |
|---|---|
| Park Account Manager | ---------- |
| FMP HelpDesk email | FMP HelpDesk (in Lotus Notes) or FMP_Help_Desk@nps.gov |
| FMP HelpDesk phone | 303-969-2609 |
| Regional Coordinator | ---------- |

**Figure 28: AMRS Assistance**

### Requesting a New Report

Most reporting needs can be met through reports that are already in the AMRS. However, if you have a reporting need that is not already in the AMRS, you can first try exporting a current report to Excel and reorganize the data to get the information you need. You can also request a new report through the HelpDesk.

Upon receipt of a request for a new report, it will be evaluated; a recommendation will then be made to either modify an existing report to accommodate the need or pass the new report request on to the systems group for creation.

# APPENDIX A: REPORT EXPORT FORMATS

The following are the report export formats supported by AMRS. All of them work for scheduled jobs, but not all work with the AMRS Viewer.

| Format | Description | Works with the AMRS Viewer (Yes/No) |
|---|---|---|
| Crystal Report | Format requires the AMRS viewer to work with the report. **This option should not be used.** | Yes |
| Microsoft Excel | File can be opened with Microsoft Excel and includes any formatting, page and report headers, sub-totals, etc. Contrast with Microsoft Excel (Data Only). | Yes |
| Microsoft Excel (Data Only) | File can be opened with Microsoft Excel, but it only includes the data records themselves, without headers, formatting, sub-totals, etc. Best when you want to do additional data manipulation and calculations on the results. This format is also good if you want to import data into Microsoft Access. Contrast with Microsoft Excel format. | Yes |
| Adobe Acrobat | File can be opened, viewed, and printed by anyone with an Adobe Acrobat PDF viewer. The resulting Acrobat document includes any formatting, graphic images, etc. of the report, and it is formatted exactly as it will print out. Appropriate for sharing presentation-quality reports electronically with others. This is the format that you will most likely use if you want to e-mail the report to others. Not appropriate when additional data manipulation is required. | Yes |
| Rich Text | File is meant to be imported into a variety of word processing programs. Microsoft Word format is preferable when Microsoft Word is the chosen word processor. | Yes |

| Format | Description | Works with the AMRS Viewer (Yes/No) |
|---|---|---|
| Plain Text | File strips out all font changes and formatting, leaving a version of the report that can be imported into almost any other program. May be useful for including in e-mail messages to others. | No |
| Paginated Text | Similar to Plain Text, but it includes pagination information (any page breaks, page footers, etc.). | No |
| Tab-separated Text | Format provides the data records in the report, and it uses tab characters to separate the individual fields within a record. Also includes any report header and footer information. | No |
| Tab-separated Values | Provides only the data records themselves. Fields within each record are separated by tab characters. No formatting, headers, or footers are included. This is most likely the format you would use if you wanted to import the results of the report into some other analysis program, such as Microsoft Access, or wanted to provide the data to a third-party for analysis. | No |
| Character-separated Values | Similar to Tab-separated Values, but it allows you to designate the character used to separate one field from another (unlike Tab-separated Values, which assumes that the tab character is used to separate the values). | No |

**Figure 29: Report Export Formats**

# APPENDIX B: REPORT PARAMETER DEFINITIONS AND EXPLANATIONS

The following tables provide more detailed information regarding some of the parameters you might encounter when running a report. If you have further questions about what report parameters mean, you may wish to contact your Park Account Manager (PAM) or the FMP HelpDesk.

Asset Code:

Asset codes are used in the FMSS to organize assets into different major asset types. Each asset group is broken up into different asset categories, each of which is identified by its asset code. For example, if an individual wanted to run a report regarding Maintained Landscapes, he or she would look under the asset group "Grounds" and enter "3100" as the Asset Code parameter.

| Asset Group | Asset Category | Asset Code | Unit of Measure |
|---|---|---|---|
| **SITE/AREA** | | | |
| | Site/Area | 0000 | Each |
| **ROAD, PARKING AREA, ROAD BRIDGE, ROAD TUNNEL** | | | |
| | Road | 1100 | Miles |
| | Parking Area | 1300 | Square Feet |
| | Road Bridge | 1700 | Square Feet |
| | Road Tunnel | 1800 | Square Feet |
| **TRAIL** | | | |
| | Trail | 2100 | Lineal Feet |
| | Trail Bridge (Substantial) | 2200 | Square Feet |
| | Trail Tunnel (Substantial) | 2300 | Square Feet |
| **GROUNDS** | | | |
| | Maintained Landscapes | 3100 | Acres |
| | Campground/Overnight Campsite | 3600 | Number of Sites |
| | Picnic Area | 3700 | Number of Sites |
| | Boundary | 3800 | Lineal Feet |
| **BUILDING** | | | |
| | Building | 4100 | Square Feet |
| | Housing | 4300 | Square Feet |
| **UTILITY** | | | |
| | Water System | 5100 | Gallons per day |
| | Waste Water System | 5200 | Gallons per day |
| | Heating & Cooling Plant | 5300 | Each |
| | Electrical System | 5400 | Each |
| | Radio System | 5500 | Each |
| | Phone System | 5510 | Each |
| | IT System (i.e. LAN) | 5520 | Each |
| | Fuel System | 5700 | Each |

| Asset Group | Asset Category | Asset Code | Unit of Measure |
|---|---|---|---|
| | Solid Waste/Recycling System | 5800 | Cubic Yards |
| **MARINE / WATERWAY/ WATERFRONT** | | | |
| | Dam/Levee/Dike | 6100 | Cubic Yards |
| | Constructed Waterway | 6200 | Miles |
| | Marina/Waterfront System | 6300 | LF of shoreline |
| **AVIATION/ RAILROAD** | | | |
| | Aviation System | 6400 | Square Feet |
| | | | |
| | Railroad System | 6500 | Lineal Feet |
| **UNIQUE ASSETS (Not already covered in other Asset Codes)** | | | |
| | Outdoor Sculptures/ Monuments/Memorials/ Large Interpretive Objects | 7100 | Each |
| | Ruins | 7200 | Square Feet |
| | Fortification | 7300 | Square Feet |
| | Towers/Missile Silos | 7400 | Each |
| | Amphitheaters | 7900 | Number of Seats |
| **FLEET** | | | |
| | Fleet | 8999 | Each |
| **NO CODE** | | | |
| | No Asset Code Available | 9999 | Each |

**Figure 30: Asset Codes**

Asset Status:
Asset status refers to the current functionality of an asset. Asset status may be useful in identifying possible management actions to be taken regarding that asset or in inventorying the asset portfolio.

Review the definitions and examples below for the different asset statuses.

| Asset Status | Definition and Examples |
|---|---|
| **Operational** | **Definition:** Asset is occupied and used in support of the park mission and operations, or asset is not operational but supports the park mission and operations as a "maintained asset."<br>**Examples:**<br>• Asset (E.G. roads, trails, landscapes, campgrounds, buildings, utilities, dams, waterways) that is currently in use or being rehabilitated for a specific use.<br>• Asset that is "vacant" but supports the park mission as an unoccupied asset (historic buildings, ruins or fortifications). |
| **Operational / Obsolete** | **Definition:** Asset that is operational and obsolete/functionally deficient for any reason, including:<br>• Asset is undersized for its current use (does not meet functional demands/requirements).<br>• Asset does not meet applicable codes and regulations.<br>**Examples:**<br>• Visitor center that was planned and constructed for a significantly smaller visitor population than is currently being served.<br>• Utility (water treatment plant, fuel system) that does not meet governing codes and regulations. |
| **Planned** | **Definition:** Asset that is planned or under construction, from initial planning stages until the new asset has been accepted by NPS (at which time the asset becomes operational).<br>**Example:**<br>• Any planned asset, including roads, campgrounds, buildings, utilities, etc. |
| **Excess** | **Definition:** Asset does not meet the park's mission or is not required for operations (although it may be convenient to use).<br>• Asset does not relate to a future desired condition in the park unit.<br>• Asset's removal is determined by the park's General Management Plan (GMP).<br>**Example:**<br>• Any asset that is, or should be, slated for demolition. |
| **Inactive** | **Definition:** Asset is vacant and not being used for park mission or operations, and the asset's future use is not imminent.<br>**Example:**<br>• Assets that require "mothballing" for potential future reuse. |
| **Removed** | **Definition:** Asset was once a part of the inventory, but has since been removed by the park.<br>**Example:**<br>• Demolished buildings or other assets. |
| **Not Applicable** | **Definition:** For asset location records that are not asset-specific.<br>**Examples:**<br>• A site or area such as the park or district<br>• Fleet asset location records |

**Figure 31: Asset Status Definitions and Examples**

Labor Code: Every employee involved in maintenance has an FMSS labor record associated with a number labor code. The labor record contains the person's name, park unit, and pay rate, along with other information. The labor code is used to enter the hours an employee

worked and can also be used to track projects on which he or she worked. Once an individual is assigned a labor code he or she keeps it forever, even if they move to another park or if they are a seasonal employee.

If you need to enter an individual's labor code as one of the parameters to run a report, see your PAM for the correct labor code.

Location/Asset Number: As locations or assets are entered into the FMSS, they are given a numerical code which can be used to identify that specific location or asset. If you need to enter a location/asset number as one of the parameters to run a report, see your PAM for the correct number.

Supervisor Code: Just as employees have their own FMSS labor code, supervisors also have a labor code associated with them. The supervisor's labor code can be used in the supervisory field to track projects and who is responsible for the project.

If you need to enter a supervisor code as one of the parameters to run a report, see your PAM for the correct supervisor's labor code.

Work Types and Sub-Work Types:
As work orders are entered into the FMSS, they are assigned different work types and sub-work types. These categorizations identify more specifically the type of work that is occurring, making it possible to run reports for certain types of work occurring in the park.

When entering work types and sub-work types as report parameters, use the table below to understand how each is defined.

| Work Type | Sub-Work Type | Description |
|---|---|---|
| **Capital Improvement (CI)** | | |
| | Alterations | Changes to interior arrangements or other physical characteristics of an existing facility or installed equipment so that it can be used more effectively for its currently designated purpose or adapted to a new use. Includes work referred to as improvement, conversion, remodeling, and modernization. |
| | New Construction | Construction that adds to the existing footprint of an asset, or creates a new asset. |
| **Facility Maintenance (FM)** | | |
| | Component Renewal (CR) | The planned replacement of a component or system that will reach the end of its useful life based on condition and life cycle analysis within the facility's lifetime. Includes roof systems, utility components, pavement, and other major dynamic equipment. |
| | Component Renewal, Deferred Maintenance | A component renewal work type that has been tracked in the system and is not funded when identified as Deferred Maintenance will then move into the Component Renewal |

| Work Type | Sub-Work Type | Description |
|---|---|---|
| | (CRDM) | Deferred Maintenance work type category. |
| | Corrective Maintenance (CM) | Unscheduled reactive repairs that would not be estimated and planned but are accomplished by local staff or existing service contractors. |
| | Deferred Maintenance (DM) | Maintenance that was not performed when it should have been or was scheduled and was put off or delayed. Continued deferment of maintenance will result in deficiencies. |
| | Emergency Maintenance (EM) | A maintenance task carried out in order to avert an immediate hazard or to correct an unexpected failure. |
| | Immediate Personal Hazard (IPH) | A facility deficiency that poses a threat to human health and safety and requires immediate action. |
| | Legislatively Mandated Accessibility (LMAC) | Deficiencies that must be corrected in response to regulatory requirements. These activities include retrofitting for accessibility. |
| | Legislatively Mandated Code Compliance (CO) | Deficiencies that must be corrected in response to regulatory requirements. These activities include retrofitting for code compliance and removing hazardous materials. |
| | Legislatively Mandated Fire / Structure (LMFS) | Deficiencies that must be corrected in response to regulatory requirements related to structural fire protection codes. |
| | Legislatively Mandated Life / Safety Code (LMLS) | |
| | Preventive Maintenance (PM) | Regularly scheduled periodic maintenance activities (within a year) on selected equipment. Includes inspection, lubrication, and minor adjustment. |
| | Recurring Maintenance (RM) | Work activities that recur based on normal wear patterns on a periodic cycle of 1 to 10 years. Includes painting, caulking, sealing, carpet replacements, etc. |
| | Recurring Maintenance, Deferred Maintenance (RMDM) | Recurring maintenance that has been identified and tracked in the system and is not funded when required will move into this work type category. |
| **Facility Operations (FO)** | | Work activities performed on a recurring basis throughout the year which intend to meet routine, daily park operational needs. Includes janitorial and custodial services, snow removal, operation or purchase of utilities, grounds keeping, etc. |

**Figure 32: Work Types and Sub-Work Types**

# APPENDIX C: GLOSSARY OF TERMS

**Accountability** – The obligations to report, explain, or justify to primary stakeholders. *Student Manual.*
**Assessment** – The process of comparing and evaluating an entity against established standards, and documenting the differences. *ICAP.*
**Asset** – Real or personal property which the NPS desires to track and manage as a distinct identifiable entity. It may be a physical structure or grouping of structures, land features, or other tangible property that has a specific service or function, such as a farm, cemetery, campground, marina, or sewage treatment plant. The term "asset" shall also be applied to movable items, such as vehicles and equipment. *ICAP.*
**Asset Categories** – Identifies eight primary asset categories to track and report resource expenditures: Site Area, Road, Trail, Grounds, Buildings, Utilities, Marine/Waterway, and Unique Assets. The categories are further defined by asset codes (example: Paved Road, Unpaved Road, Paved Parking Area, Unpaved Parking Area, Bridge and Tunnel). See Appendix B, Asset Code.
**Asset Codes** – Further detail of asset categories (example: Paved Road 1100, Unpaved Road 1200, Paved Parking Area 1300, Unpaved Parking Area 1350, Bridge 1700 and Tunnel 1800). See Appendix B, Asset Code.
**Asset Deficiencies** – A facility defect that occurs when maintenance and repair tasks are not performed in a timely manner. Deficiencies may not have immediately observable physical consequences, but when allowed to accumulate uncorrected, they inevitably lead to deterioration of performance, loss of asset value, or both. An accumulation of such uncorrected deficiencies is a backlog that represents a liability (in both physical and financial terms) for an asset. *FMAR.*
**Asset Management** – A systematic process of maintaining, upgrading, and operating physical assets cost-effectively. It combines engineering principles with sound business practices and economic theory, and it provides tools to facilitate a more organized logical approach to decision making, providing a framework for handling both short- and long-term planning. *Asset Management.*
**Asset Management Process** – A process representing the primary steps required to properly maintain and account for assets utilizing best business practices: Mission, Needs Assessment, Inventory of Assets, Work Identification, Work Planning, Work Performance and Evaluation. *Student Manual.*
**Asset Priority Index (API)** – An asset evaluation process that quantifies the value of an asset in relation to the mission of the park. The API ranks assets according to a numeric rating system.
**Audit Reports** – Reports from the FMSS system used to identify erroneous data entries and processes.
**Backlog** – The unfunded deficiencies work required to bring facilities and collateral equipment to a condition that meets accepted codes, laws, and standards to achieve expected life. *FMAR.*
**Backlog of Maintenance and Repair (BMAR)** – The unfunded maintenance work required to bring facilities and collateral equipment to a condition that meets acceptable facilities maintenance standards. *NASA.*

**Business Practices** – Business process – any series of steps that are followed in order to carry out a business task. *Managerial Accounting.*
**Capital Improvements (Alterations)** – See Appendix B, Work Types and Sub-Work Types.
**Capital Improvements (New Construction)** – See Appendix B, Work Types and Sub-Work Types.
**Child Relationship** – FMSS – Assets and work orders have a hierarchical relationship, with Child having a subordinate relationship to the Parent.
**Component** – A building subsystem, major item of equipment, or of a major facility.
**Component Renewal (CR)** – See Appendix B, Work Types and Sub-Work Types.
**Component Renewal Deferred Maintenance (CR –DM)** – See Appendix B, Work Types and Sub-Work Types.
**Condition Assessment** – The inspection and documentation of the condition of the features of an asset as measured against the applicable maintenance or condition standards. It provides the basis for long-range maintenance planning, as well as annual work plans and budgets. *ICAP.*
**Condition Assessment, Annual (INCAA)** – The inspection of an asset identifying obvious and apparent deficiencies, documenting the condition as measured against the applicable maintenance or condition standards. It provides the basis for annual work plans and budgets. Develops verifiable deficiency cost estimates, determines the asset's Facility Condition Index for a simple measurement of a facility's relative condition at a particular point in time. Reviewing the API/FCI Relationship assists managers in determining appropriate action. The Annual Assessment identifies the deferred maintenance for a specific asset.
**Condition Assessment, Comprehensive (INCAC)** – The review and validation of the inventory, inspection of an asset identifying in-depth deficiencies, documenting the condition as measured against the applicable maintenance or condition standards. It provides the basis for long–range maintenance planning, as well as annual work plans and budgets. Develops verifiable deficiency cost estimates, determines the Facility Condition Index for a simple measurement of a facility's relative condition at a particular point in time. The Comprehensive Assessment identifies the deferred maintenance for a specific asset. The CA Comprehensive is to be performed on an asset every five (5) years. If conditions warrant, or regulations require, a CA-Comprehensive may occur more frequently.
**Condition Assessment Job Plan** – An FMSS application that defines the standardize processes or steps involved to perform an inspection of the condition of an asset and its features for the purpose of generating Asset Deficiency Work Orders. *Student Manual.*
**Condition Assessment Work Order** – A work order created through the Preventative Maintenance module that lists the necessary steps and tasks to complete inspection of an asset and its features. This standardizes inspections throughout the NPS by creating a work order on which identified deficiencies can be reported against for each asset. *Student Manual*.
**Condition Assessment Surveys** – See also Facility Condition Assessment Survey – Periodic inspections of PP&E to determine their current condition and cost to correct any deficiencies. It is desirable that condition assessment surveys be based on generally accepted methods and standards consistently applied. *Accounting for Property.*
**Contractor** – The supplier of the end item and associated support items to the Government under the terms of a specific contract. *NASA.*
**Corrective Maintenance** – See Appendix B, Work Types and Sub-Work Types.

**Cost Estimate** – An educated guess as to what an item costs to repair or replace. The estimate is based on previous experience with like assets in similar condition and/or developed using a cost estimating program.
**Cost Estimating Software System (CESS)** – Timberline™ Precision Estimating Tool – A software program used to assist in determining the cost of repairing identified asset deficiencies.
**Current Replacement Value (CRV)** – Standard industry costs and engineering estimates of materials, supplies, and labor required to replace facility at existing size and functional capability. This cost includes current costs for planning/design, construction, and construction management. *FMAR.*
**Cyclic Maintenance** – Work activities that recur on a periodic cycle of greater than one year. Typical projects include re-roofing or re-painting buildings, overhauling engines, and refinishing hardwood floors. *Parks and Recreation.*
**Data Import/Export** – Periodic exchanges of data between one or more systems.
**Data Integration** – Changing data in one system affects data in all systems.
**Data Linking** – Viewing data in two or more systems for comparative purposes.
**Data Migration** – Moving data from one system to another on a one-time basis, effectively making the first system redundant.
**Deferred Maintenance** – See Appendix B, Work Types and Sub-Work Types.
**Deficiencies** – A facilities defect that occurs when maintenance and repair tasks are not performed in a timely manner. Deficiencies may not have immediately observable physical consequences, but when allowed to accumulate uncorrected, they inevitably lead to deterioration of performance, loss of asset value, or both. An accumulation of such uncorrected deficiency is a backlog that represents a liability (in both physical and financial terms) for a building. *FMAR.*
**Deficiency Ratings** – See Critical deficiency – FCAS, Serious Deficiency – FCAS, Minor deficiency – FCAS.
**Deficiency Work Order** – A work order generated by the FMSS program, which documents deficiencies discovered while performing a condition assessment on an asset. *See Deferred Maintenance or Component Renewal.*
**Demolition** – Removal of an asset that has been determined to be unsafe or no longer meets, or is not required to meet, mission goals. Removal of an NPS asset is determined by management in conjunction with the NPS planning and compliance procedures.
**Emergency Maintenance** – See Appendix B, Work Types and Sub-Work Types.
**Equipment** – FMSS – A piece of rolling stock or a mechanical device used as part of an asset upon which work is performed. Examples include: a boat, a tractor, a generator, or an HVAC system. *Student Manual.*
**Estimated Cost** – A calculated anticipated amount, as distinguished from an actual outlay, based upon related cost experience, prevailing wages and prices, or anticipated future conditions, usually for the purposes of contract negotiation, budgetary control, or reimbursement. *NASA.*
**Estimated Remaining Life** – An educated estimate of the number of years before equipment needs to be replaced. Based on published data tables and specific field information.
**Excess – Asset Status** – See Appendix B, Asset Status.
**Facilities Condition Assessment Survey (FCAS)** – See also Condition Assessment Surveys. Establishes the overall condition of an asset through the development of the asset's

replacement cost and the calculation of the total deferred maintenance cost. This information is then used to develop the FCI for the asset.

**Facility Condition Index (FCI)** – A measure of a facility's relative condition at a particular point in time compared to similar facilities. The FCI rating is a ratio of the cost of repair of an asset's deficiencies (deferred maintenance, recurring maintenance that has been deferred, component renewal that has been deferred, and immediate personnel hazard life safety repairs) divided by the current replacement value for the asset.

$$\text{FCI} = \text{FM sub–work types: } \frac{\text{DM + RM –DM + CR –DM + IPH}}{\text{CRV}}$$

The following ratings are baseline indicators that will be reviewed and adjusted by asset category as data is evaluated:

Good = ≤ .100 – Assets in good condition are typically maintained with ONPS funds. Preventive Maintenance (cyclic) funds are used to maintain systems or features with a recurrence of more than one year to twenty –five years.

Fair = .101 – .150 – Assets in fair condition typically require Preventive Maintenance funds or other special emphasis funds to bring systems or features back to good condition. Repair Rehab funds may be used for more expensive/complex deferred maintenance items.

Poor = .151 – .500 – Assets in poor condition typically require Repair Rehab funds to bring them in to good condition. Line-item funds may be used to reduce the more expensive/complex deferred maintenance items.

Serious = > .500 – Assets in serious condition: Heritage assets – Strongly consider stabilization/restoration. Non-heritage assets strongly consider replacement.

**Facilities Management** – The planning, prioritizing, organizing, controlling, reporting, evaluation, and adjusting of facility use to support NPS activities based upon a customer's facility needs and the Servicewide and Area's mission requirements. *NASA.*

**Facilities Management Program (FMP)** – The management systems and support computer software for planning, organizing, directing, and controlling park maintenance*. ICAP.*

**Facility Management Software System (FMSS)** – This software meets all the NPS criteria for a relational database to manage assets at the individual park level. *Student Manual.* FMSS (Maximo™) is an asset –based work identification, work management, and work analysis program. This "cradle to grave" asset and work management system allows a park, region or WASO to track all aspects of work related to a specific asset, such as: planning and design, construction, operations/maintenance, and rehabilitation or removal.

**Facility Maintenance** – The day-to-day activities, as well as the planned work, required to preserve facilities (buildings, structures, grounds, and utility systems) in such a condition that they may be used for their designated purpose over an intended service life. Facility maintenance includes all activities not included in facility operations and capital improvements. *NASA.*

**Facility Operations** – See Appendix B, Work Types and Sub-Work Types.

**Facilities Work Plan** – The process of taking each individual work statement or qualified work request and developing the scope of work, estimating costs, determining the need for engineering or compliance approvals, determining the relationships with associated independent work orders, and determining funding, resources and priorities.

**Facility** – A term used to encompass land, buildings, other structures, and other real property improvements, including utilities. *NASA.*

**Facility Maintenance Responsibility** – The entity responsible for performing the maintenance required on an asset.
**Facility Operation Responsible** – The agency that performs activities related to an asset's normal performance, including costs of utilities, janitorial services, window cleaning, rodent and pest control, and waste management.
**Feature** – A distinct element or separately identifiable part of an asset on which work is performed or which creates an identifiable workload. Examples of features include, but are not limited to: trees and landscaping; interior doors; roof surface/coverings; refrigerators; boilers; HVAC systems. The NPS inventory is based on the identification and qualification of its assets and the features that make up each asset. The condition of an asset is reported in terms of the condition of its features. *ICAP.*
**Fire and Life Safety Annual** – An annual fire and life safety inspection conducted by a qualified inspector. This annual inspection will be a follow –up to the INFPCA; it is not a substitute for it. These inspections shall be conducted in accord with the Annual Fire Protection Condition Assessment, as set in RM-58.
**Fire Protection Condition Assessment (INFPCA)** – A comprehensive fire and life inspection of a facility conducted by a Registered Fire Protection Engineer, Certified Fire Inspector, or other person approved by the Regional Structural Fire Management Officer. Each occupied building is required to be inspected initially, and then again, when there are any changes in the occupancy or changes to the building. All buildings that are critical to the operation of the park shall also be inspected. These inspections shall be conducted in accord with the Fire Protection Condition Assessment as set in RM-58.
**Gross Square Footage** – The sum of floor areas within the outside faces of the exterior walls for all building levels which have floor surfaces. Covered walkways, open roofed-over areas that are paved, porches and similar spaces shall have the architectural area multiplied by an area factor of 0.50. *AIA.BOMA, IFMA.*
**Heritage Asset** – Property, plant, and equipment (PP&E) that are unique because of historical or natural significance; cultural, educational, or artistic importance; or significant architectural characteristics.
**Hierarchical Relationships** – FMSS – Classifies assets or work orders according to various criteria into successive levels or layers. The layers are titled "parent" or "child."
**Immediate Personal Hazard (IPH)** – See Appendix B, Work Types and Sub-Work Types.
**Inactive – Asset Status** – See Appendix B, Asset Status.
**Inspections** – The documentation of the condition of the features of an asset as measured against applicable maintenance, condition, or other standards.
**Inventory** – The enumeration and identification of the assets and their functions that are to be managed and maintained by a park. The inventory is the foundation for effective facilities management. The inventory should permit identifying maintainable items, including those subject to preventative maintenance. *ICAP.*
**Inventory Condition Assessment Program (ICAP)** – A legacy computer software program no longer supported by the NPS.
**Job Plan** – FMSS – Describes operational steps, estimated labor, materials and tools needed to accomplish a specific task. *Student Manual.*
**Legislatively Mandated Code Compliance** – See Appendix B, Work Types and Sub-Work Types.

**Life-Cycle Analysis Trade-off** – An alternatives analysis used to consider the benefits of renovating, disposing, or replacing an existing asset.
**Life-Cycle Assessments** – Analytical process for determining subsystem replacement needs based on expected design life and expert judgment.
**Life-Cycle Asset Management** – Systematic process of maintaining, upgrading, and operating physical assets cost effectively. It combines engineering principles with sound business practices and economic theory, and it provides tools to facilitate a more organized, logical approach to decision-making. In the broadest sense, life-cycle asset management is a strategic approach to managing physical infrastructure.
**Life-Cycle Costing** – An acquisition or procurement technique, which considers operating, maintenance, and other costs in addition to the acquisition cost of assets. Since it results in a forecast of maintenance expense, these forecasts may serve as a basis against which to compare actual maintenance expense and estimate deferred maintenance. *Accounting for Property.*
**Life-Cycle Costs (LCC)** – A form of economic analysis that considers the total cost of owning, operating, and maintaining a building over its useful life. Life-cycle costs are the sum of the present value of:

- Investment costs less salvage values, at the end of the study period.
- Nonfuel operation and maintenance costs.
- Replacement costs less salvage costs of replaced building systems.
- Energy costs.

All life-cycle cost analysis of energy-related projects should be performed using the energy cost projections and discount rates provided by the National Institute of Standards and Technology in support of Department of Energy responsibilities.*. NASA.*
**Life-Cycle Planning** – Means of budgeting for the cost of replacing subsystems based on their expected design life, or expected time of failure. *Defensible Recapitalisation.*
**Line-Item Construction (LI)** – Includes the reconstruction or replacement of park facilities, the preservation of historic and cultural resources, and the repair and reconstruction of park roads. In general, projects fitting this category are major projects that require more than one year to complete. *Parks and Recreation Report.*
**Minor Deficiency** – FCAS – Exists where: Standard preventive maintenance practices and conservation methods have not been followed; or there is a reduced life expectancy of affected or related materials and or systems; or there is a condition with long term impact beyond 5 years.
**National Natural Landmark** – Asset is designated as a National Natural Landmark. The only natural areas program of national scope that identifies and recognizes the best examples of biological and geological features in both public and private ownership.
**Needs Assessment** – A process to determine that facilities are constructed operated and maintained only when they provide the best protection or preservation of park resources; provide essential visitor services; support critical operations or functions in the park areas; or where absence of those facilities would substantially decrease the ability of the NPS to meet its mission. *Instructor Manual.*
**Not Applicable – Asset Status** – See Appendix B, Asset Status.
**Operating Plan** – A budget plan, when approved, that is the basis for funding and financial control of obligations, costs, and disbursements.
**Operational – Asset Status** – See Appendix B, Asset Status.

**Operational/Obsolete – Asset Status** – See Appendix B, Asset Status.
**Parent Relationship** – FMSS – Assets and work orders have a hierarchical relationship, with Parent having a higher level than Child.
**Park Alpha Code** – Four-digit alpha code for a park.
**Planned – Asset Status** – See Appendix B, Asset Status.
**PMIS** – See Project Management Information System.
**Poor** – See also Facility Condition Index – A facility condition. Facility does not meet most maintenance standards and requires frequent repairs/rehabilitation to prevent more costly repairs, provide a minimal level of operating function, and to prevent significant loss of life expectancy. *See Facility Condition Index. FMAR.*
**Preventive Maintenance** – See Appendix B, Work Types and Sub-Work Types.
**Preventative Maintenance Work Order** – FMSS – A work order generated to initiate a recurring scheduled activity including; preventative maintenance, recurring maintenance, or component renewal on an asset.
**Project Management Information System (PMIS)** – The Web –based program developed by NPS to track program needs and deferred maintenance throughout the Service.
**Real Property** – Any interest in land and anything permanently attached to it, including structures, fixtures, and improvements. *NASA.*
**Recapitalization** – The planned replacement of facility subsystems, such as roofs, utilities, heating, ventilation, and air conditioning. *Defensible Recapitalization.*
**Recurring Maintenance (RM)** – See Appendix B, Work Types and Sub-Work Types.
**Recurring Maintenance Deferred Maintenance (RM–DM)** – See Appendix B, Work Types and Sub-Work Types.
**Removed – Asset Status** – See Appendix B, Asset Status.
**Repair** – Work to restore damaged or worn-out property to a normal operating condition. Repairs are curative, while maintenance is preventative. *Cost of Ownership.*
**Repair Rehabilitation (RERE, R&R)** – Work activities (projects) designed to restore or extend the life of an asset. Examples include: replacing sewer lines, repairing building foundations, and rehabilitating campgrounds and trails. *Parks and Recreation Report.*
**Replacement** – Exchange or substitution of one fixed asset for another, which has the capacity to perform the same function. *Cost of Ownership.*
**Replacement Cost** – See Current Replacement Value.
**Scope of Work** – A thorough breakdown of the best method for remediating a deficiency. *Student Manual.*
**Serious Deficiency** – FMSS – Exists where: there is a deterioration, which if not corrected within 2 –5 years, will result in the failure of the feature; or a threat to the health and/or safety of the user may occur within 2 –5 years if the deterioration is not corrected; or there is deterioration of adjacent or related materials and/or system as a result of the feature's deficiency.
**Service Level** – For a specific work activity, the annual rate or frequency of work performed.
**Service Lifetime** – The period of years over which the building provides shelter and an environment supportive of the activities it houses. *Cost of Ownership.*
**Shortfall** – Difference between funds allocated and funds required to meet the Service/manufacturer's maintenance standards and applicable codes. *FMAR.*
SMAC – Servicewide Maintenance Advisory Council

**Specifications** – A document that stipulates methods, materials, performance, testing, limitations, or other criteria that must be adhered to during the construction of a facility. *NASA.*
**Specification Template** – FMSS – A data collection template used to document specific information and attributes of assets maintained within NPS.
**Standard** – Maintenance standards are defined as the expected condition or degree of usefulness of a facility or equipment item. A maintenance standard may be stated as both a required condition and a minimum acceptable condition beyond which the facility or equipment is deemed unsatisfactory. *NASA.*
**Standard Industry Practices** – Accepted published practices by peer organizations or associations.
**Stewardship** – The recognition and acceptance that the ownership of facilities requires the vision, resolve, experience, and expertise to ensure that resources are allocated effectively to sustain the investment. *Student Manual.*
**Stewardship Land** – Includes land and land rights other than that acquired for or in connection with general PP&E. "Land" is defined as the solid part of the surface of the earth, excluding natural resources related to the land.
**Subsystems** – A major portion of a system that performs a specific function in the overall operational function of a system; a major functional subassembly or grouping of items or equipment that is essential to operational completeness of a system. Project Management.
**System Rules** – FMSS – Identify standardized requirements for how to operate and use the Facility Management Software System. Student Manual.
**Total Life –Cycle Cost Method** – If used, the following should be presented for each major class of PP&E:

- Original date of the maintenance forecast and an explanation for any changes to the forecast.
- Prior year balance of the cumulative deferred maintenance amount.
- Dollar amount of maintenance that was defined by the professionals who designed, built, or managed the PP&E as required maintenance for the reporting period.
- Dollar amount of maintenance actually performed during the period.
- Difference between the forecast and actual maintenance, any adjustments to the scheduled amounts deemed necessary by the managers of the PP&E.
- Ending cumulative balance for the reporting period for each major class of asset experiencing deferred maintenance.

**Work Activity** – A basic element of Facility Management that describes a specific type of maintenance work performed on a park feature (i.e., patch potholes; open/close trails; pickup litter; replace roof covering).
**Work Breakdown Structure (WBS)** – A property of items that allows additional information to be attached to each item to organize (sort) the estimate in other sequences and report on items in other. *Student Manual.*
**Work Order** – Process for documenting work needs and collecting information to aid the work scheduling and assignment process. Information collected should include labor, equipment and material costs, hours, types and quantities.
**Work Type** – FMSS – Standard definitions of work tasks, which provide a tool, enabling facility managers to strengthen planning, execution, and performance measurement at the park level and to gain stewardship credibility. See Appendix B, Work Types and Sub-Work Types.